

Appearing monthly  
ANNUAL CUMULATIVE INDEX

INDEX 1992

ISSN 0027-5107  
MUREAV 265-283/INDEX, 1-53 (1992)

# MUTATION RESEARCH

International journal on mutagenesis,  
chromosome breakage and related subjects

Editor-in-Chief: F.H. Sobels (Leiden)

Board of Managing Editors

J. Ashby, *Macclesfield*; S.M. Galloway, *West Point, PA* (Mutation Research Letters); J.M. Gentile, *Holland, MI*; B.W. Glickman, *Sidney, B.C.*; P.C. Hanawalt, *Stanford, CA* (DNA Repair); P.H.M. Lohman, *Leiden* (DNA Repair); K. Sankaranarayanan, *Leiden*; F.J. de Serres, *Research Triangle Park, NC*; R.B. Setlow, *Upton, NY* (DNAGing); M.D. Shelby, *Research Triangle Park, NC*; T. Sugimura, *Tokyo* (DNAGing); H. Takebe, *Kyoto* (DNA Repair); J. Vijg, *Leiden* (DNAGing); E. Vogel, *Leiden*; J.S. Wassom, *Oak Ridge, TN*

Fundamental and Molecular Mechanisms  
of Mutagenesis

Elsevier

## MUTATION RESEARCH

*International journal on mutagenesis, chromosome breakage and related subjects*

### INSTRUCTIONS TO AUTHORS

**Types of paper** *Mutation Research* contains 3 types of publication. (1) Papers reporting results of original fundamental research concerning mutagenesis, chromosome breakage and related subjects. (2) Review articles. (3) Short communications (to be published in the Section *Mutation Research Letters*).

**General arrangement of papers** Papers should be preferably in English, but may also be submitted in French or German. A summary (about 300 words) is mandatory for all (normal-length) articles. Papers in German or French should have a summary in English. The first paragraph of the article should summarize the research problem and the pertinent findings. The main text may be divided into sections such as Materials and methods, Experimental, Results, Discussion.

In papers mentioning chemicals, authors are requested to include *CAS registry numbers*. Registry numbers can be found by consulting Chemical Abstracts Ninth Collective Molecule Formula Index, by using Lockheed's computer access file named Chemline or by contacting the Chemical Abstracts Service, P.O. Box 3012, Columbus, Ohio 43210 (U.S.A.).

**Keywords** A list of 3–6 words or short phrases should be included on the first page of the manuscript. In the event that keywords are not supplied editorial discretion will be exercised in introducing appropriate words.

**Preparation of text** (a) Manuscripts should be typewritten, double-spaced with wide margins, on one side of the paper only. Legends, footnotes—everything—must also be double-spaced. (b) The title page should include a footnote indicating the author to whom correspondence and proofs should be sent stating his full address, Tel. No. and Fax. (c) Line-drawn figures (including graphs) should be submitted in black ink on white paper and must be lettered ready for direct reproduction. Sharp photoprints of lettered line drawings may also be submitted. It is important that the drawings themselves AND the lettering are in proportion and large enough to allow for reduction before printing. Figures should be prepared suitably for either one column width (76 mm) or the entire page width (160 mm). The maximum height is 206 mm. The amount of reduction that will be made can be judged from the sizes of figures in recent issues of the journal. (d) Half-tone figures should be submitted as very sharp and contrasty glossy photoprints, separate from line drawings. (e) Legends for both line-drawn and half-tone figures should be typed on separate sheets. (f) Tables (also to be typed double-spaced) should be provided with headings. (g) Typescripts should be carefully checked before submission to obviate alterations after acceptance.

**References** The journal uses the Harvard system, in which names and dates are given in the body of the text and an alphabetical list of references at the end of the manuscript. References in the text should give the author's surname with the year of publication, e.g.: Smith (1980); Smith and Jones (1967a, 1979b); Baker et al. (1978). In the list of references, titles of journals should be abbreviated to conform with *Chemical Abstracts Bibliographic Guide for Authors and Editors* 1974. References to books should give details of chapter title, editors, title of the book, publishers and their location.

#### Examples:

Ehrenberg, L., and C.A. Wachtmeister (1977) Safety precautions in work with mutagenic and carcinogenic chemicals, in: B.J. Kilbey, M.S. Legator, W. Nichols and C. Ramel (Eds.), *Handbook of Mutagenicity Test Procedures*, Elsevier, Amsterdam, pp. 401–410.

Kastenbaum, M.A., and K.O. Bowman (1970) Tables for determining the statistical significance of mutation frequencies, *Mutation Res.*, 9, 527–549.

**Proofs** Only printer's errors may be corrected: no changes in or additions to the edited manuscript will be accepted.

In case printers' proofs are returned by any courier service, they should be addressed as follows:

Mr. J.G. Corbet, *Mutation Research*, Elsevier Science Publishers, Molenwerf 1, 1014 AG Amsterdam (The Netherlands).  
Telefax 31 20 5803 454.

**Submission** of a manuscript will be held to imply that it contains original work and that it has not been published or submitted for publication elsewhere. It also implies the transfer of the Copyright from the author to the publisher.

**Contributions**—in triplicate (one original plus two copies, and three sets of the originals of the illustrations)—may be sent to Prof. F.H. Sobels, Editor-in-Chief, *Mutation Research*, Department of Radiation Genetics and Chemical Mutagenesis, State University of Leiden, Sylvius Laboratories, Wassenaarseweg 72, P.O. Box 9503, 2300 RA Leiden (The Netherlands).

or to

Prof. J.M. Gentile, *Mutation Research*, Biology Department, Hope College, Holland, MI 49423 (U.S.A.).

or to

Dr. M.D. Shelby, *Mutation Research*, NIEHS, P.O. Box 12233, Research Triangle Park, NC 27709 (U.S.A.).

Manuscripts in the field of Molecular Genetics may be submitted to

Dr. B.W. Glickman, *Mutation Research*, Director, Centre for Environmental Health, 9865 West Saanich Road, Sidney, B.C. V8L 3S1 (Canada).

Manuscripts for publication in *DNA Repair* may be submitted to Professor Philip C. Hanawalt, Herrin Biology Laboratories, Stanford University, Stanford, CA 94305 (U.S.A.).

or to

Prof. Dr. P.H.M. Lohman, Department of Radiation Genetics and Chemical Mutagenesis, State University of Leiden, Sylvius Laboratories, Wassenaarseweg 72, P.O. Box 9503, 2300 RA Leiden (The Netherlands)

or to

Professor H. Takebe, Department of Experimental Radiology, Faculty of Medicine, Kyoto University, Kyoto 606 (Japan)

Manuscripts for publication in *Mutation Research Letters* may be submitted to

Dr. S.M. Galloway, Merck Sharp and Dohme Research Laboratories, W 44-1, West Point, PA 19486 (U.S.A.)

Prof. J.M. Gentile, Biology Department, Hope College, Holland, MI 49423 (U.S.A.)

Manuscripts for publication in *DNAAging, Genetic Instability and Aging* may be submitted to

Richard B. Setlow, Biology Department, Brookhaven National Laboratory, Upton, Long Island, NY 11973 (U.S.A.).

Takashi Sugimura, National Cancer Center, 1-1, Tsukiji 5-chome, Chuo-ku, Tokyo 104 (Japan).

Jan Vijg, Mediscand Ingeny B.V., P.O. Box 685, 2300 AR Leiden (The Netherlands)

**Reprints** 50 reprints of each article are sent to the author(s) free of charge. Additional reprints can be ordered by the author(s).

**MUTATION RESEARCH**

*International journal on mutagenesis, chromosome breakage and  
related subjects*

Vol. 265-283 (1992)

**ANNUAL CUMULATIVE INDEX**





# Mutation Research

INTERNATIONAL JOURNAL ON MUTAGENESIS,  
CHROMOSOME BREAKAGE AND RELATED SUBJECTS

EDITOR-IN-CHIEF: F.H. Sobels, *Leiden*

## BOARD OF MANAGING EDITORS

J. Ashby, *Macclesfield*; S.M. Galloway, *West Point, PA* (Mutation Research Letters); J.M. Gentile, *Holland, MI*; B.W. Glickman, *Sidney, B.C.*; P.C. Hanawalt, *Stanford, CA* (DNA Repair); P.H.M. Lohman, *Leiden* (DNA Repair); K. Sankaranarayanan, *Leiden*; F.J. de Serres, *Research Triangle Park, NC*; R.B. Setlow, *Upton, NY* (DNAGing); M.D. Shelby, *Research Triangle Park, NC*; T. Sugimura, *Tokyo* (DNAGing); H. Takebe, *Kyoto* (DNA Repair); J. Vijg, *Leiden* (DNAGing); E. Vogel, *Leiden*; J.S. Wassom, *Oak Ridge, TN*

## EDITORIAL BOARD

R.J. Albertini, *Burlington, VT*  
H. Bartsch, *Lyon*  
M.A. Bender, *Upton, NY*  
B.A. Bridges, *Brighton*  
A.V. Carrano, *Livermore, CA*  
E.H.Y. Chu, *Ann Arbor, MI*  
U.H. Ehling, *Neuherberg*  
E. Eisenstadt, *Boston, MA*  
H.J. Evans, *Edinburgh*  
W.M. Generoso, *Oak Ridge, TN*  
R.H. Haynes, *Palo Alto, CA*  
J.A. Heddle, *Toronto, Ont.*  
G.R. Hoffmann, *Worcester, MA*

B.A. Kihlman, *Uppsala*  
M.F. Lyon, *Harwell*  
D.G. MacPhee, *Bundoora, Vic.*  
T. Matsushima, *Tokyo*  
G.R. Mohn, *Leiden*  
A. Morley, *Bedford Park*  
E. Moustacchi, *Paris*  
A.T. Natarajan, *Leiden*  
G. Obe, *Essen*  
G. Olivieri, *Rome*  
J.M. Parry, *Swansea*  
R.J. Preston, *Oak Ridge, TN*  
L.S. Ripley, *Newark, N.J.*

H.S. Rosenkranz, *Pittsburgh, PA*  
L.B. Russell, *Oak Ridge, TN*  
M.S. Sasaki, *Kyoto*  
J.R.K. Savage, *Harwell*  
T. Sugimura, *Tokyo*  
J. Thacker, *Harwell*  
W.G. Thilly, *Cambridge, MA*  
L.H. Thompson, *Livermore, CA*  
R.C. von Borstel, *Edmonton, Alb.*  
G.C. Walker, *Cambridge, MA*  
S. Wolff, *San Francisco, CA*  
F.K. Zimmermann, *Darmstadt*

Vols. 265-283

INDEX 1992



ELSEVIER SCIENCE PUBLISHERS B.V.  
AMSTERDAM · OXFORD · NEW YORK · TOKYO

*US mailing notice* — *Mutation Research, Fundamental and Molecular Mechanisms of Mutagenesis* (ISSN 0027-5107) is published monthly by Elsevier Science Publishers (Molenwerf 1, P.O. Box 211, 1000 AE Amsterdam, The Netherlands). Annual subscription price in the U.S.A. US \$1624.00 (subject to change), including air speed delivery. Second class postage paid at Jamaica, NY 11431.

USA POSTMASTERS: Send address changes to *Mutation Research, Fundamental and Molecular Mechanisms of Mutagenesis*, Publications Expediting, Inc., 200 Meacham Avenue, Elmont, NY 11003.

Airfreight and mailing in the U.S.A. by Publications Expediting.

**Advertising** Advertising orders and enquiries can be sent to the Advertising Manager, Elsevier Science Publishers, Advertising Department, P.O. Box 211, 1000 AE Amsterdam (The Netherlands), Tel.: 20-515.3220; FAX: 20-683.3041, attn. Advertising Dept.; Great Britain: T.G. Scott and Son Ltd., Portland House, 21 Narborough Road, Cosby, Leicestershire LE9 5TA, Tel.: 0533-753.333; FAX: 0533-750.522, attn. Tim Blake; U.S.A. and Canada: Weston Media Associates, Daniel Lipner, P.O. Box 1110, Greens Farms, CT 06436-1110, Tel.: 203-261.2500; FAX: 203-261.0101.

© 1992, ELSEVIER SCIENCE PUBLISHERS B.V. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher, Elsevier Science Publishers B.V., Copyright and Permissions Department, P.O. Box 521, 1000 AM Amsterdam (The Netherlands).

This journal is printed on acid-free paper.

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of the rapid advances in the medical sciences, the Publisher recommends that independent verification of diagnoses and drug dosages should be made.

Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

*Special regulations for authors.* Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the Publisher. This transfer will ensure the widest possible dissemination of information.

*Special regulations for readers in the U.S.A.* This journal has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal use of specific clients. This consent is given on the condition that the copier pays through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. The appropriate fee should be forwarded with a copy of the first page of the article to the Copyright Clearance Center, Inc., 27 Congress Street, SALEM, MA 01970 (U.S.A.). If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1980 may be copied for a per-copy fee of U.S. \$2.25, also payable through the Center. This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purpose, or for creating new collective works. Special written permission must be obtained from the Publisher for such copying.

PRINTED IN THE NETHERLANDS

# *Announcement from the Publisher*

## ELSEVIER SCIENCE PUBLISHERS

*prefers the submission of electronic manuscripts*

Electronic manuscripts have the advantage that there is no need for the rekeying of text, thereby avoiding the possibility of introducing errors and resulting in reliable and fast delivery of proofs.



The preferred storage medium is a 5  $\frac{1}{4}$  or 3  $\frac{1}{2}$  inch disk in MS-DOS format, although other systems are welcome, e.g. Macintosh.



After **final acceptance**, your disk plus one final, printed and exactly matching version (as a printout) should be submitted together to the accepting editor. **It is important that the file on disk and the printout are identical.** Both will then be forwarded by the editor to Elsevier.



Please follow the general instructions on style/arrangement and, in particular, the reference style of this journal as given in 'Instructions to Authors'.



Please label the disk with your name, the software & hardware used and the name of the file to be processed.



Further information can be found under 'Instructions to Authors - Electronic manuscripts'.

*Contact the Publisher  
for further information.*

ELSEVIER SCIENCE PUBLISHERS B.V.  
P.O. Box 1527, 1000 BM Amsterdam  
The Netherlands  
Fax: (+31-20) 5803454





## Master Author Index to Volumes 265-283

- Aagaard Nielsen, P.  
Mutagenicity studies on complex environmental mixtures: selection of solvent system for extraction (276) 117
- Abbondandolo, A., see Sorsa, M. (271) 261
- Abdul Rahiman, M., see Mathew, G. (280) 169
- Adler, I.-D., see Kliesch, U. (283) 249
- Aeschbacher, H.U., see Minnunni, M. (269) 193
- Afanas'ev, I.B., see Korkina, L.G. (265) 245
- Ager, D.D. and Radul, J.A.  
Effect of 60-Hz magnetic fields on ultraviolet light-induced mutation and mitotic recombination in *Saccharomyces cerevisiae* (283) 279
- Aghamohammadi, S.Z. and Savage, J.R.K.  
The effect of X-irradiation on cell cycle progression and chromatid aberrations in stimulated human lymphocytes using cohort analysis studies (268) 223
- Aghamohammadi, S.Z., Morris, T., Stevens, D.L. and Thacker, J.  
Rapid screening for deletion mutations in the hprt gene using the polymerase chain reaction: X-ray and  $\alpha$ -particle mutant spectra (269) 1
- Aguirre V., S., see Tapia P., F. (281) 283
- Agurell, E. and Stensman, C.  
Salmonella mutagenicity of three complex mixtures assayed with the microsuspension technique. A WHO/IPCS/CSCM study (276) 87
- Agurell, E., see Claxton, L.D. (276) 23
- Aji, T., see Arimoto, S. (282) 177
- Ajimi, S., see Iwakura, K. (278) 131
- Akaiwa, E., see Shimoi, K. (266) 205
- Akinluyi, P., see Green, M.H.L. (273) 137
- Akiyama, M., see Kushiro, J.-i. (272) 17
- Akiyama, M., see Kyoizumi, S. (265) 173
- Akuzawa, S., Yamaguchi, H., Masuda, T. and Ueno, Y.  
Radical-mediated modification of deoxyguanine and deoxyribose by luteoskyrin and related anthraquinones (266) 63
- Al-Sabti, K., Lloyd, D.C., Edwards, A.A. and Stegnar, P.  
A survey of lymphocyte chromosomal damage in Slovenian workers exposed to occupational clastogens (280) 215
- Aladjem, M.I. and Lavi, S.  
The mechanism of carcinogen-induced DNA amplification: in vivo and in vitro studies (276) 339
- Albano, A., see Brandi, G. (281) 157
- Albertini, R.J., see Fuscoe, J.C. (283) 13
- Ali, A.-S.K., see Balasem, A.N. (271) 209
- Alitalo, K., see Mäkelä, T.P. (276) 307
- Alldrick, A.J., Brennan-Craddock, W.E., Lake, B.G. and Rowland, I.R.  
Effect of hepatic cytochrome P-450 inducing agents on mutagen activity in the host-mediated assay (268) 307
- Alldrick, A.J., see Ho, T.A. (269) 279
- Allen, J.W., see Collins, B.W. (281) 287
- Allen, J.W., see Kligerman, A.D. (280) 35
- Allen, J.W., see Tolbert, P.E. (271) 69
- Alvi, N.K. and Williams, G.M.  
Restriction fragment pattern analysis of HPRT mutations induced in rat-liver epithelial cells by alkylating and arylating agents (265) 283
- Aly, F.A.E., see Amer, S.M. (279) 165
- Ambrosino, P., see Barrai, I. (267) 173
- Amer, S.M. and Aly, F.A.E.  
Cytogenetic effects of pesticides. IV. Cytogenetic effects of the insecticides Gardona and Dursban (279) 165
- Amler, L.C., Shibasaki, Y., Savelyeva, L. and Schwab, M.  
Amplification of the N-myc gene in human neuroblastomas: tandemly repeated amplicons within homogeneously staining regions on different chromosomes with the retention of single copy gene at the resident site (276) 291
- Ammenheuser, M.M., see Ward Jr., J.B. (268) 49
- Amundson, S.A. and Liber, H.L.  
A comparison of induced mutation at homologous alleles of the *tk* locus in human cells. II. Molecular analysis of mutants (267) 89
- An, J. and Hsie, A.W.  
Effects of an inhibitor and a mimic of superoxide dismutase on bleomycin mutagenesis in Chinese hamster ovary cells (270) 167
- Anderson, A., see Trottier, Y. (281) 39
- Anderson, D., see Davies, M.J. (265) 165
- Anderson, R., see Van Rensburg, C.E.J. (265) 255
- Anderson Jr., R.A., see Berryman, S.H. (278) 47
- Andersson, B., Fält, S. and Lambert, B.  
Strand specificity for mutations induced by (+)-anti BPDE in the hprt gene in human T-lymphocytes (269) 129
- Andersson, B., see Smith-Sørensen, B. (269) 41
- Andersson, H.C. and Kihlman, B.A.  
Induction of chromosomal aberrations by camptothecin in root-tip cells of *Vicia faba* (268) 167
- Andersson, H.C., see Kihlman, B.A. (269) 259
- Andersson, M., see Morales, P. (268) 315
- Ando, M., see Matsushita, H. (271) 1
- Ando, N., see Hatanaka, Y. (278) 99

- Andreeva, I.V., see Rusina, O.Y. (283) 161
- Andreeva, I.V., see Slezáriková, V. (270) 145
- Andreoli, C., see Crebelli, R. (266) 117
- Angelis, K., Bříza, J., Šatava, J., Skákal, I., Velemínský, J., Vlasák, J., Kleibl, K. and Margison, G.P.  
Increased resistance to the toxic effects of alkylating agents in tobacco expressing the *E. coli* DNA repair gene *ada* (273) 271
- Anisimov, V.N. and Osipova, G.Y.  
Effect of neonatal exposure to 5-bromo-2'-deoxyuridine on life span, estrus function and tumor development in rats – an argument in favor of the mutation theory of aging? (275) 97
- Anklam, E., see Glatt, H. (281) 151
- Anstey, A.V., see Arlett, C.F. (273) 127
- Anstey, A.V., see Green, M.H.L. (273) 137
- Anwar, W., Au, W.W., Massoud, A., Gentile, J.M. and Ashby, J.  
Summary recommendations that have an impact on genetic toxicology research in developing countries (272) 83
- Aoki, K., see Tamura, N. (283) 97
- Aoki, S., see Yamamura, E. (278) 127
- Applegate, M., see Hozier, J. (270) 201
- Arceo, C., see Zimmering, S. (281) 169
- Ardito, G., see Bigatti, P. (282) 19
- Arenaz, P., Bitticks, L., Pannell, K.H. and Garcia, S.  
Genotoxic potential of crown ethers in mammalian cells: Induction of sister-chromatid exchanges (280) 109
- Arey, J., Harger, W.P., Helmig, D. and Atkinson, R.  
Bioassay-directed fractionation of mutagenic PAH atmospheric photooxidation products and ambient particulate extracts (281) 67
- Ariizumi-Shibusawa, C., see Takeshita, T. (275) 21
- Arimoto, S., Matsuoka, H., Aji, T., Ishii, A., Wataya, Y. and Hayatsu, H.  
Modified metabolism of a carcinogen, 3-amino-1-methyl-5H-pyrido[4,3-b]indole (Trp-P-2), by liver S9 from *Schistosoma japonicum*-infected mice (282) 177
- Arimura, H., see Hatanaka, Y. (278) 99
- Ariyuki, F., see Kondo, Y. (278) 187
- Arlett, C.F., Harcourt, S.A., Cole, J., Green, M.H.L. and Anstey, A.V.  
A comparison of the response of unstimulated and stimulated T-lymphocytes and fibroblasts from normal, xeroderma pigmentosum and trichothiodystrophy donors to the lethal action of UV-C (273) 127
- Arlett, C.F., see Cole, J. (273) 171
- Arlett, C.F., see Green, M.H.L. (273) 137
- Armstrong, J.D. and Kunz, B.A.  
Excision repair influences the site and strand specificity of sunlight mutagenesis in yeast (274) 123
- Armstrong, J.D. and Kunz, B.A.  
Photoreactivation implicates cyclobutane dimers as the major promutagenic UVB lesions in yeast (268) 83
- Armstrong, M.J., Bean, C.L. and Galloway, S.M.  
A quantitative assessment of the cytotoxicity associated with chromosomal aberration detection in Chinese hamster ovary cells (265) 45
- Armstrong, M.J., see Bean, C.L. (265) 31
- Arnheim, N. and Cortopassi, G.  
Deleterious mitochondrial DNA mutations accumulate in aging human tissues (275) 157
- Arnheim, N., see Cortopassi, G.A. (277) 239
- Aro, T., see Harjulehto-Mervaala, T. (275) 81
- Arras, C.A., see Mayer, V.W. (279) 41
- Arras, C.A., see Sheu, C.W. (280) 181
- Arroyo, P.L., Hatch-Pigott, V., Mower, H.F. and Cooney, R.V.  
Mutagenicity of nitric oxide and its inhibition by antioxidants (281) 193
- Aruga, F., see Ohuchida, A. (278) 139
- Asaka, A., see Takeshita, T. (275) 21
- Asanami, S., see Awogi, T. (278) 181
- Asano, N. and Hagiwara, T.  
The mouse peripheral blood micronucleus test with 2-acetylaminofluorene using the acridine orange supravital staining method (278) 153
- Ascarelli-Goell, R., see Skaliter, R. (267) 139
- Ashby, J.  
Consideration of CASE predictions of genotoxic carcinogenesis for omeprazole, methapyrilene and azathioprine (272) 1
- Ashby, J.  
The non-genotoxicity of *o*-anisidine: Further comments (279) 225
- Ashby, J., see Anwar, W. (272) 83
- Ashby, J., see Brusick, D.J. (266) 1
- Ashby, J., see Lohman, P.H.M. (266) 7
- Ashman, C.R.  
DNA base sequence changes in spontaneous and ethyl methanesulfonate-induced mutations of a chromosomally-integrated gene in Chinese hamster ovary cells (270) 115
- Asita, A.O., Hayashi, M., Kodama, Y., Matsuoka, A., Suzuki, T. and Sofuni, T.  
Micronucleated reticulocyte induction by ethylating agents in mice (271) 29
- Asita, A.O., see Hayashi, M. (278) 209
- Asita, A.O., see Suzuki, T. (278) 169
- Atai, H., see Hatakeyama, Y. (278) 193
- Atakurt, Y., see Şardaş, S. (279) 117
- Atkinson, R., see Arey, J. (281) 67
- Au, W.W., see Anwar, W. (272) 83
- Au, W.W., see Hoyos, L.S. (280) 29
- Aubin, R.A., see Mirzayans, R. (281) 115
- Aubry, J.-M., see Lutgerink, J.T. (275) 377
- Audic, A., see Cadet, J. (275) 343
- Autio, K., see Sorsa, M. (271) 261
- Avitabile, A., see Pontecorvo, G. (266) 93
- Avivi, L., see Shiloh, Y. (276) 329
- Awogi, T., Murata, K., Uejima, M., Kuwahara, T., Asanami, S., Shimono, K. and Morita, T.  
Induction of micronucleated reticulocytes by potassium bromate and potassium chromate in CD-1 male mice (278) 181
- Awogi, T., see Hayashi, M. (278) 209
- Axelrod, D.E., see Kimmel, M. (276) 225



- Ayaki, H., see Wang, Y. (273) 221
- Ayrton, A.D., Neville, S. and Ioannides, C.  
Cytosolic activation of 2-aminoanthracene: Implications in its use as diagnostic mutagen in the Ames test (265) 1
- Ayukawa, E., see Hara, M. (278) 175
- Baan, R.A., see Van Loon, A.A.W.M. (274) 19
- Baba, T., see Higashikuni, N. (278) 159
- Babson, J.R., Gavitt, N.E., Boteju, L.W. and Hanna, P.E.  
Comparative toxicity and mutagenicity of *N*-hydroxy-2-acetylaminofluorene and 7-acetyl-*N*-hydroxy-2-acetylaminofluorene in human lymphoblasts (269) 73
- Backendorf, C.M.P., see Lehmann, A.R. (273) 1
- Bagley, S., see Claxton, L.D. (276) 23
- Bagley, S.T., Stoltz, S.L., Becker, D.M. and Keen, R.E.  
Characterization of organic extracts from standard reference materials 1649, 'urban dust/organics,' and 1650, 'diesel particulate matter', using a microsuspension assay. A WHO/IPCS/CSCM study (276) 81
- Baguley, B.C., see Iwamoto, Y. (268) 35
- Bailey, G., Hendricks, J. and Dashwood, R.  
Anticarcinogenesis in fish (267) 243
- Bains, W.  
Local sequence dependence of rate of base replacement in mammals (267) 43
- Balansky, R., Blagoeva, P. and Mircheva, Z.  
Clastogenic activity of urethane in mice (281) 99
- Balansky, R.  
Effects of sodium selenite and caffeine on mutagenesis induced by *N*-methyl-*N*-nitrosourea, *N*-methyl-*N'*-nitro-*N*-nitrosoguanidine and aflatoxin B<sub>1</sub> in *S. typhimurium* (269) 307
- Balansky, R., see De Flora, S. (267) 183
- Balansky, R.M., see Blagoeva, P.M. (268) 77
- Balasem, A.N., Ali, A.-S.K., Mosa, H.S. and Hussain, K.O.  
Chromosomal aberration analysis in peripheral lymphocytes of radiation workers (271) 209
- Balbueno, R.A., see Gimmler-Luz, M.C. (279) 227
- Ball, J.C., see Hoyer, M.E. (283) 295
- Ball, J.C., see Montreuil, C.N. (282) 89
- Ballarin, C., Sarto, F., Giacomelli, L., Bartolucci, G.B. and Clonfero, E.  
Micronucleated cells in nasal mucosa of formaldehyde-exposed workers (280) 1
- Ballin, A., see Zakut, H. (276) 275
- Balter, H., Griffith, C.S. and Margulies, L.  
Radiation and transposon-induced genetic damage in *Drosophila melanogaster*: X-ray dose-response and synergism with DNA-repair deficiency (267) 31
- Bamezai, R. and Kumar, N.  
Sleep deprivation in human males and its effect on SCE rates in chromosomes - a preliminary study (283) 229
- Bar-Am, I., see Shiloh, Y. (276) 329
- Barale, R., Scapoli, C., Falezza, A., Ventura, L., Bernacchi, F., Loprieno, N. and Barrai, I.  
Skin cytogenetic assay for the detection of clastogens-carcinogens topically administered to mice (271) 223
- Barale, R., see Barrai, I. (267) 173
- Barale, R., see Betti, C. (281) 255
- Barbé, J., see Clerch, B. (281) 207
- Barbé, J., see Villaverde, A. (281) 137
- Barbouti, A., see Kourakis, A. (279) 145
- Barisano, P., see Monaco, M. (282) 235
- Barnett, L.B., Lovell, D.P., Felton, C.F., Gibson, B.J., Cobb, R.R., Sharpe, D.S., Shelby, M.D. and Lewis, S.E.  
Ethylene dibromide: negative results with the mouse dominant lethal assay and the electrophoretic specific-locus test (282) 127
- Barrai, I., Barale, R., Scapoli, C., Ambrosino, P., Beretta, M., Sbrana, C., Micheletti, R. and Loprieno, N.  
The analysis of the joint effect of substances on reversion systems and the assessment of antimutagenicity (267) 173
- Barrai, I., see Barale, R. (271) 223
- Bartke, A., see Berryman, S.H. (278) 47
- Bartolucci, G.B., see Ballarin, C. (280) 1
- Bartsch, H., see Chen, C.S. (265) 211
- Basha, S.G., Krasavin, E.A. and Kozubek, S.  
Radioprotective action of glycerol and cysteamine on inactivation and mutagenesis in *Salmonella* tester strains after  $\gamma$ - and heavy ion irradiation (269) 237
- Basha, S.G., Krasavin, E.A. and Kozubek, S.  
The effect of the anoxic radiosensitizing agent TAN on induction of revertants by  $\gamma$ -rays and helium ions in *Salmonella* tester strains (267) 133
- Bassani, B., see Marchetti, F. (266) 151
- Bassani, B., see Tiveron, C. (266) 143
- Batiste-Alentorn, M., see Ribas, G. (278) 43
- Bauchinger, M. and Schmid, E.  
Clastogenicity of 2-chlorobenzylidene malonitrile (CS) in V79 Chinese hamster cells (282) 231
- Bauchinger, M., see Braselmann, H. (283) 221
- Bauer, C., see Paolini, M. (281) 245
- Baumeister, M., see Kirkland, D.J. (279) 181
- Baumer, A., see Linnane, A.W. (275) 195
- Baxevanis, C.N., see Sarri, C. (270) 125
- Bean, C.L., Armstrong, M.J. and Galloway, S.M.  
Effect of sampling time on chromosome aberration yield for 7 chemicals in Chinese hamster ovary cells (265) 31
- Bean, C.L., see Armstrong, M.J. (265) 45
- Beare, D.M., see Cole, J. (273) 171
- Beaune, P.H., see Carrière, V. (268) 11
- Beaven, R., see Dunipace, A.J. (279) 255
- Beçak, W., see Salvadori, D.M.F. (265) 237
- Becker, D.M., see Bagley, S.T. (276) 81
- Becking, G.C., see Lewtas, J. (276) 3
- Beeri, R., see Zakut, H. (276) 275
- Belitsky, G.A., see Fuchs, S.Y. (268) 155
- Belitsky, G.A., see Fuchs, S.Y. (269) 185
- Belluck, D., see Roloff, B. (281) 295
- Belouchi, A. and Bradley, W.E.C.  
A mutational hotspot in the *aprt* gene of Chinese hamster cells (266) 221
- Bender, M.A., Preston, R.J., Leonard, R.C., Pyatt, B.E. and Gooch, P.C.  
On the distribution of spontaneous SCE in human peripheral blood lymphocytes (281) 227
- Bender, M.A., Preston, R.J., Leonard, R.C., Pyatt, B.E. and Gooch, P.C.  
Influence of white blood cell count on SCE frequency in peripheral lymphocytes (283) 87

- Benigni, R. and Giuliani, A.  
Simultaneous evaluation of genotoxicity data from different sources: a multivariate statistical approach (266) 71
- Benigni, R., Palombo, F. and Dogliotti, E.  
Multivariate statistical analysis of mutational spectra of alkylating agents (267) 77
- Benigni, R., see Crebelli, R. (266) 117
- Benner Jr., B.A., see May, W.E. (276) 11
- Benning, V., Depasse, F., Melcion, C. and Cordier, A.  
Detection of micronuclei after exposure to mitomycin C, cyclophosphamide and diethylnitrosamine by the in vivo micronucleus test in mouse splenocytes (280) 137
- Benova, D., see Darroudi, F. (272) 237
- Benova, D.K.  
Anticlastogenic effects of a polyvitamin product, 'Pharmavit', on  $\gamma$ -ray induction of somatic and germ cell chromosome aberrations in the mouse (269) 251
- Beretta, M., see Barrai, I. (267) 173
- Bernacchi, F., see Barale, R. (271) 223
- Bernal, M.L., see Sinues, B. (280) 271
- Bernstein, C., see Holmes, G.E. (275) 305
- Bernstein, H., see Holmes, G.E. (275) 305
- Berriman, J., see Ferguson, L.R. (268) 199
- Berryman, S.H., Anderson Jr., R.A., Weis, J. and Bartke, A.  
Evaluation of the co-mutagenicity of ethanol and  $\Delta^9$ -tetrahydrocannabinol with Trenimon (278) 47
- Bessho, T., see Matsumoto, K. (268) 59
- Betancourt, M., Ortíz, R. and González, C.  
Proliferation index in bone marrow cells from severely malnourished rats during lactation (283) 173
- Betina, V., see Krivobok, S. (279) 1
- Betti, C., Davini, T. and Barale, R.  
Genotoxic activity of methyl mercury chloride and dimethyl mercury in human lymphocytes (281) 255
- Bezze, C., see Paleologo, M. (281) 11
- Bhat, U., see Rodriguez, H. (270) 219
- Bhimani, R., see Patel, U. (283) 145
- Bhunya, S.P. and Jena, G.B.  
Genotoxic potential of the organochlorine insecticide lindane ( $\gamma$ -BHC): an in vivo study in chicks (272) 175
- Biagi, G.L., see Paolini, M. (281) 245
- Bianco, N., see Russo, A. (269) 119
- Biasin, M.R., see Celotti, L. (281) 17
- Bicchi, C., see Rubiolo, P. (281) 143
- Bigatti, P., Lamberti, L., Oberto, G. and Ardito, G.  
Sister-chromatid exchange rates in XX and XY cells of ten chimeric *Callithrix jacchus* individuals (282) 19
- Bigner, S.H., see Fuller, G.N. (276) 299
- Birnbaum, D., see Gaudray, P. (276) 317
- Bishop, J.B., see Lockhart, A.-M.C. (272) 35
- Bishop, J.B., see Witt, K.L. (283) 53
- Bishop, J.B., see Witt, K.L. (283) 59
- Bitticks, L., see Arenaz, P. (280) 109
- Bittles, A.H.  
Evidence for and against the causal involvement of mitochondrial DNA mutation in mammalian ageing (275) 217
- Blagoeva, P., see Balansky, R. (281) 99
- Blagoeva, P.M., Balansky, R.M., Mircheva, T.J. and Simeonova, M.I.  
Diminished genotoxicity of mitomycin C and farmorubicin included in polybutylcyanoacrylate nanoparticles (268) 77
- Blaise Smith, P., see Langenbach, R. (277) 251
- Blömeke, B., Poginsky, B., Schmutte, C., Marquardt, H. and Westendorf, J.  
Formation of genotoxic metabolites from anthraquinone glycosides, present in *Rubia tinctorum* L. (265) 263
- Bloom, S.E., see Wilmer, J.L. (268) 115
- Boeniger, M., see Schulte, P.A. (278) 237
- Bogdanffy, M.S., see Kuykendall, J.R. (283) 131
- Boisen, T., see Knudsen, L.E. (279) 129
- Boiteux, S., see Felzenszwalb, I. (273) 263
- Bolcsfoldi, G. and Hellmér, L.  
Comments on the paper 'The non-genotoxicity to rodents of the potent bladder carcinogens *o*-anisidine and *p*-cresidine' (279) 223
- Bolcsfoldi, G., see Hellmér, L. (272) 145
- Bolcsfoldi, G., see Hellmér, L. (272) 161
- Bomhard, E.M., Bremmer, J.N. and Herbold, B.A.  
Review of the mutagenicity/genotoxicity of butylated hydroxytoluene (277) 187
- Bonatti, S., see Taningher, M. (282) 99
- Bonatti, S., see Viaggi, S. (265) 9
- Bonin, A.M., see Croker, P. (283) 7
- Boone, C.W., Steele, V.E. and Kelloff, G.J.  
Screening for chemopreventive (anticarcinogenic) compounds in rodents (267) 251
- Boone, C.W., see Kelloff, G.J. (267) 291
- Bootsma, D., see Eker, A.P.M. (274) 211
- Borba, H., see Rueff, J. (265) 75
- Borkovec, L., see Rubeš, J. (283) 199
- Børresen, A.-L., see Smith-Sørensen, B. (269) 41
- Boteju, L.W., see Babson, J.R. (269) 73
- Bouffler, S.D., see Godfrey, D.B. (274) 225
- Bourre, J.-M., see Ceballos-Picot, I. (275) 281
- Bouvier, G., see Chen, C.S. (265) 211
- Bovalini, L., see Riccio, M.L. (279) 103
- Bowman, K.O. and Kastenbaum, M.A.  
Overdispersion of aggregated genetic data (272) 133
- Boyd, D.R., see Willems, M.I. (278) 227
- Boyd, J.B., see Sakaguchi, K. (274) 11
- Boyes, B.G., see Rogers, C.G. (280) 17
- Bradley, W.E.C., see Belouchi, A. (266) 221
- Braga, M.A., see Santos-Mello, R. (280) 261
- Brambilla, G. and Martelli, A.  
Grain counting in the in vitro hepatocyte DNA-repair assay (272) 9
- Brams, A. and De Meester, C.  
Mutagenic potency of heterocyclic amines towards *Salmonella typhimurium*; possible causes of variability in the results observed (280) 103
- Bramstedt, H., see Rannug, U. (282) 219
- Brandi, G., Luzzi, L., Giacomoni, P., Albano, A., Cattabeni, F. and Cantoni, O.  
Differential effect of the amino acid cystine in cultured mammalian and bacterial cells exposed to oxidative stress (281) 157
- Brasemann, H., Schmid, E. and Bauchinger, M.  
Chromosome analysis in a population living in an area of



- Germany with the highest fallout deposition from the Chernobyl accident (283) 221
- Brčić-Kostić, K., Stojiljković, I., Salaj-Šmic, E. and Trgovčević, Ž.  
Overproduction of the RecD polypeptide sensitizes *Escherichia coli* cells to  $\gamma$ -radiation (281) 123
- Bremmer, J.N., see Bomhard, E.M. (277) 187
- Brennan-Craddock, W.E., see Alldrick, A.J. (268) 307
- Brezzell, M.D., see Sinsheimer, J.E. (268) 255
- Bridges, B.A. and Brown, G.M.  
Mutagenic DNA repair in *Escherichia coli* XXI. A stable SOS-inducing signal persisting after excision repair of ultraviolet damage (270) 135
- Bridges, B.A., see Lehmann, A.R. (273) 1
- Bříza, J., see Angelis, K. (273) 271
- Brockman, H.E., Stack, H.F. and Waters, M.D.  
Antimutagenicity profiles of some natural substances (267) 157
- Bronner, C.E., Welker, D.L. and Deering, R.A.  
Mutations affecting sensitivity of the cellular slime mold *Dictyostelium discoideum* to DNA-damaging agents (274) 187
- Bronzetti, G., Della Croce, C. and Galli, A.  
Antimutagenicity in yeast (267) 193
- Bronzetti, G., see De Flora, S. (267) 153
- Bronzetti, G., see Galli, A. (282) 55
- Bronzetti, G., see Monaco, M. (282) 235
- Broto, A., see Sinues, B. (280) 271
- Brown, G.M., see Bridges, B.A. (270) 135
- Brown, J.L., see Kitchin, K.T. (266) 253
- Brozmanová, J., see Kleibl, K. (282) 39
- Brunk, U.T., Jones, C.B. and Sohal, R.S.  
A novel hypothesis of lipofuscinogenesis and cellular aging based on interactions between oxidative stress and autophagocytosis (275) 395
- Brunk, U.T., see Sohal, R.S. (275) 295
- Brusick, D.J., Ashby, J., De Serres, F.J., Lohman, P.H.M., Matsushima, T., Matter, B.E., Mendelsohn, M.L., Moore II, D.H., Nesnow, S. and Waters, M.D.  
A method for combining and comparing short-term genotoxicity test data: Preface A Report from ICPEMC Committee 1 (266) 1
- Brusick, D.J., see Lohman, P.H.M. (266) 7
- Bryant, D.W., see Claxton, L.D. (276) 23
- Bryant, M.F., see Kligerman, A.D. (280) 35
- Bryant, P.E.  
Induction of chromosomal damage by restriction endonuclease in CHO cells porated with streptolysin O (268) 27
- Budge, C.L., see Kusewitt, D.F. (274) 163
- Burkart, W., see Hain, J. (283) 137
- Burnette, L., see Fuscoe, J.C. (283) 13
- Buttin, G., see Toledo, F. (276) 261
- Byrne, E. and Dennett, X.  
Respiratory chain failure in adult muscle fibres: relationship with ageing and possible implications for the neuronal pool (275) 125
- Byun, D.H., see Park, E.-H. (268) 239
- Cabral-Neto, J.B., see Madzak, C. (274) 135
- Cadet, J., Odin, F., Mouret, J.-F., Polverelli, M., Audic, A., Giacomoni, P., Favier, A. and Richard, M.-J.  
Chemical and biochemical postlabeling methods for singling out specific oxidative DNA lesions (275) 343
- Callais, F., see Min, S. (280) 225
- Callewaert, D.M., see Sarkar, F.H. (282) 273
- Calomme, M., see Rubiolo, P. (281) 143
- Calsou, P., see Puyo, M.-F. (282) 247
- Camoirano, A., see De Flora, S. (267) 183
- Campbell, J.A., see Kligerman, A.D. (280) 35
- Candrian, U., see Kálin, I. (283) 119
- Cantatore, P., see Gadaleta, M.N. (275) 181
- Cantelli-Forti, G., see Paolini, M. (281) 245
- Cantoni, O., see Brandi, G. (281) 157
- Cantoni, O., see Fiorani, M. (282) 25
- Cantor, C.R., see Saffran, W.A. (274) 1
- Capobianco, T., see Dolara, P. (283) 113
- Caprathe, B.W., see Kropko, M.L. (281) 233
- Carballo, M., Mudry, M.D., Larripa, I.B., Villamil, E. and D'Aquino, M.  
Genotoxic action of an aqueous extract of *Heliotropium curassavicum* var. *argentinum* (279) 245
- Carbonell, E., see Sorsa, M. (271) 261
- Carere, A., see Crebelli, R. (266) 117
- Carfagna, M., see Pontecorvo, G. (266) 93
- Carreau, M. and Hunting, D.  
Transcription-dependent and independent DNA excision repair pathways in human cells (274) 57
- Carrière, V., De Waziers, I., Courtois, Y.A., Leroux, J.-P. and Beaune, P.H.  
Cytochrome P450 induction and mutagenicity of 2-aminoanthracene (2AA) in rat liver and gut (268) 11
- Carstensen, S., see Von der Hude, W. (278) 289
- Carty, M.P., Levine, A.S. and Dixon, K.  
HeLa cell single-stranded DNA-binding protein increases the accuracy of DNA synthesis by DNA polymerase  $\alpha$  in vitro (274) 29
- Casati, A., Stefanini, M., Giorgi, R. and Nuzzo, F.  
Different rate of chromosome breakage in human fibroblast strains after storage in liquid nitrogen (275) 7
- Cassand, P., see Decoudu, S. (269) 269
- Cassani, M., see Morales-Ramírez, P. (279) 269
- Castelain, P., Hendrickx, B., Tromelin, A., Demerseman, P. and Moens, W.  
Mutagenic activity of dichloroethylamino derivatives of nitronaphthofuran and some nitrobenzofurans in the Salmonella/microsome assay (280) 9
- Castelain, P., see Cornet, M. (271) 213
- Castillo, J.E., see Rainbow, A.J. (274) 201
- Cattabeni, F., see Brandi, G. (281) 157
- Cavalcante, B., see Santos-Mello, R. (280) 285
- Cavolina, P., see Di Leonardo, A. (269) 319
- Ceballos-Picot, I., Nicole, A., Clément, M., Bourre, J.-M. and Sinet, P.-M.  
Age-related changes in antioxidant enzymes and lipid peroxidation in brains of control and transgenic mice overexpressing copper-zinc superoxide dismutase (275) 281
- Cebrián, M.E., see Gonsébat, M.E. (283) 91
- Cebulska-Wasilewska, A.  
Tradescantia stamen-hair mutation bioassay on the mutagenicity of radioisotope-contaminated air following the Chernobyl nuclear accident and one year later (270) 23
- Celotti, L., Ferraro, P. and Biasin, M.R.

- Detection by fluorescence analysis of DNA unwinding and unscheduled DNA synthesis, of DNA damage and repair induced in vitro by direct-acting mutagens on human lymphocytes (281) 17
- Cerniglia, C.E., see Chung, K.-T. (277) 201
- Chakravarty, B. and Srivastava, S.  
Toxicity of some heavy metals in vivo and in vitro in *Helianthus annuus* (283) 287
- Chamorro-Cevallos, G., see Morales-Ramírez, P. (279) 269
- Chang, W.P. and Little, J.B.  
Persistently elevated frequency of spontaneous mutations in progeny of CHO clones surviving X-irradiation: association with delayed reproductive death phenotype (270) 191
- Chao, C.C.-K.  
Characterization of a UV-damage recognition factor in vitro that is associated with UV resistance in HeLa cells (281) 105
- Chatterjee, S.N., see Pal, A.K. (280) 67
- Chen, B.-X., Kubo, K., Ide, H., Erlanger, B.F., Wallace, S.S. and Kow, Y.W.  
Properties of a monoclonal antibody for the detection of abasic sites, a common DNA lesion (273) 253
- Chen, C.S., Pignatelli, B., Malaveille, C., Bouvier, G., Shuker, D., Hautefeuille, A., Zhang, R.F. and Bartsch, H.  
Levels of direct-acting mutagens, total *N*-nitroso compounds in nitrosated fermented fish products, consumed in a high-risk area for gastric cancer in southern China (265) 211
- Chen, D.-q. and Zhang, C.-y.  
A simple and convenient method for gaining pure populations of lymphocytes at the first mitotic division in vitro (282) 227
- Chen, T.D., see Ma, T.-H. (270) 71
- Cheng, J.-T., see Lin, J.-K. (278) 277
- Cheong, N., Wang, Y., Jackson, M. and Iliakis, G.  
Radiation-sensitive *irs* mutants rejoin DNA double-strand breaks with efficiency similar to that of parental V79 cells but show altered response to radiation-induced  $G_2$  delay (274) 111
- Chepurnoy, A.I., see Lyubimova, K.A. (266) 135
- Cheremisina, Z.P., see Korkina, L.G. (265) 245
- Cherry, L.M., Funk, J., Lesser, J.M. and Lesam, M.  
Gender differences and the interpretation of genetic instability in Alzheimer's disease (275) 57
- Chorąży, M., see Motykiewicz, G. (280) 253
- Chorvatovičová, D. and Navarová, J.  
Suppressing effects of glucan on micronuclei induced by cyclophosphamide in mice (282) 147
- Chou, W.-G., see Zhu, W. (274) 237
- Christensen, J.M., see Knudsen, L.E. (279) 129
- Christians, F.C. and Hanawalt, P.C.  
Inhibition of transcription and strand-specific DNA repair by  $\alpha$ -amanitin in Chinese hamster ovary cells (274) 93
- Chu, J.W.K., see Thompson, D.C. (279) 83
- Chung, K.-T. and Cerniglia, C.E.  
Mutagenicity of azo dyes: Structure-activity relationships (277) 201
- Ciaravino, V., Kropko, M.L., Krishna, G., Monteith, D.K. and Theiss, J.C.  
Genotoxicity assessment of pirlmenol, a new antiarrhythmic drug (280) 205
- Citti, L., see Pardini, C. (275) 1
- Citti, L., see Pardini, C. (283) 125
- Clare, C.B., see Claxton, L.D. (276) 23
- Claxton, L., see Krewski, D. (276) 33
- Claxton, L.D., Creason, J., Leroux, B., Agurell, E., Bagley, S., Bryant, D.W., Courtois, Y.A., Douglas, G., Clare, C.B., Goto, S., Quillardet, P., Jagannath, D.R., Kataoka, K., Mohn, G., Nielsen, P.A., Ong, T., Pederson, T.C., Shimizu, H., Nylund, L., Tokiwa, H., Vink, G.J., Wang, Y. and Warshawsky, D.  
Results of the IPCS collaborative study on complex mixtures (276) 23
- Claxton, L.D., Douglas, G., Krewski, D., Lewtas, J., Matsushita, H. and Rosenkranz, H.  
Overview, conclusions, and recommendations of the IPCS collaborative study on complex mixtures (276) 61
- Claxton, L.D., see Lewtas, J. (276) 3
- Clément, M., see Ceballos-Picot, I. (275) 281
- Clements, J., see Frei, H. (279) 21
- Clerch, B., Barbé, J. and Llagostera, M.  
The role of the excision and error-prone repair systems in mutagenesis by fluorinated quinolones in *Salmonella typhimurium* (281) 207
- Clonfero, E., see Ballarin, C. (280) 1
- Clonfero, E., see Granella, M. (268) 131
- Clonfero, E., see Paleologo, M. (281) 11
- Cobb, R.R., see Barnett, L.B. (282) 127
- Cohen, M.D., Klein, C.B. and Costa, M.  
Forward mutations and DNA-protein crosslinks induced by ammonium metavanadate in cultured mammalian cells (269) 141
- Cole, J., Arlett, C.F., Norris, P.G., Stephens, G., Waugh, A.P.W., Beare, D.M. and Green, M.H.L.  
Elevated *hprt* mutant frequency in circulating T-lymphocytes of xeroderma pigmentosum patients (273) 171
- Cole, J., see Arlett, C.F. (273) 127
- Cole, J., see Green, M.H.L. (273) 137
- Collins, A., see Lehmann, A.R. (273) 1
- Collins, B.W., Howard, D.R. and Allen, J.W.  
Kinetochore-staining of spermatid micronuclei: Studies of mice treated with X-radiation or acrylamide (281) 287
- Collins, B.W., see Kligerman, A.D. (280) 35
- Cologne, J.B., see Kushi, J.-i. (272) 17
- Cologne, J.B., see Kyoizumi, S. (265) 173
- Colvin, O.M., see Wilmer, J.L. (268) 115
- Commane, M., see Perry, M.E. (276) 189
- Conti, G., see Crebelli, R. (266) 117
- Conti, L., see Crebelli, R. (266) 117
- Conti, R., see Fiorani, M. (282) 25
- Cooney, R.V., see Arroyo, P.L. (281) 193
- Cooper, J.M., see Schapira, A.H.V. (275) 133
- Coratza, G., see Riccio, M.L. (279) 103
- Cordier, A., see Benning, V. (280) 137



- Cornet, M., Castelain, P., Vercruysse, A., Laib, R., Kirsch-Volders, M. and Rogiers, V.  
Mutagenicity of 2-methylpropene (isobutene) and its epoxide in a modified *Salmonella* assay for volatile compounds (271) 213
- Corral-Debrinski, M., Shoffner, J.M., Lott, M.T. and Wallace, D.C.  
Association of mitochondrial DNA damage with aging and coronary atherosclerotic heart disease (275) 169
- Correa, M.J.F., see De Andrade, H.H.R. (279) 281
- Cortés, F., Mateos, S., Ortiz, T., Panneerselvam, N. and Mateos, J.C.  
Poly-D-lysine in G<sub>2</sub> potentiates chromosome damage induced by X-rays and mitomycin C in CHO cells (266) 99
- Cortés, F., see Daza, P. (270) 177
- Cortés, F., see Mateos, S. (266) 215
- Cortopassi, G., see Arnheim, N. (275) 157
- Cortopassi, G.A. and Arnheim, N.  
Using the polymerase chain reaction to estimate mutation frequencies and rates in human cells (277) 239
- Costa, M., see Cohen, M.D. (269) 141
- Costa, M., see Sugiyama, M. (283) 211
- Côté, G.B., see Sarri, C. (270) 125
- Courtois, Y.A., Pesle, M.L. and Festy, B.  
Activation of pro-mutagens in complex mixtures by rat liver S9 systems (276) 133
- Courtois, Y.A., see Carrière, V. (268) 11
- Courtois, Y.A., see Claxton, L.D. (276) 23
- Coutts, T.M., see Ho, T.A. (269) 279
- Cramb, E., see Sage, E. (269) 285
- Crane, A.E., see Randerath, K. (275) 355
- Creason, J., see Claxton, L.D. (276) 23
- Creason, J., see Krewski, D. (276) 33
- Crebelli, R., Andreoli, C., Carere, A., Conti, G., Conti, L., Ramusino, M.C. and Benigni, R.  
The induction of mitotic chromosome malsegregation in *Aspergillus nidulans*. Quantitative structure activity relationship (QSAR) analysis with chlorinated aliphatic hydrocarbons (266) 117
- Crespi, C., see Langenbach, R. (277) 251
- Creus, A., see Ribas, G. (278) 43
- Creus, A., see Torres, C. (280) 291
- Crocker, P., Bonin, A.M. and Stacey, N.H.  
Evaluation of amitrole mutagenicity in *Salmonella typhimurium* using prostaglandin synthase activation (283) 7
- Cruces, M.P., see Zimmering, S. (281) 169
- Cuhruk, H., see Şardaş, S. (279) 117
- Cuzick, J., see Routledge, M.N. (282) 139
- Czeizel, A., Skirpeczky, K., Mester, E. and Sankaranarayanan, K.  
The load of genetic and partially genetic disease in man. IV. Severe visual handicaps and profound childhood deafness in Hungarian school-age children (270) 103
- Czeizel, A.E., Szabados, Á. and Susánszky, É.  
Lower birth weight of offspring born after self-poisoning of parent (269) 35
- Dabholkar, M., Parker, R. and Reed, E.  
Determinants of cisplatin sensitivity in non-malignant non-drug-selected human T cell lines (274) 45
- Dachà, M., see Fiorani, M. (282) 25
- Da C. Leitão, A.A., see Meneghini, R. (266) 61
- D'Agostini, F., see De Flora, S. (267) 183
- Dai, G., see Shadley, J.D. (265) 273
- Damianova, V., see Kanaya, N. (281) 47
- Danielsen, S., see Nielsen, P.A. (278) 215
- Danna, T.F., see Randerath, E. (268) 139
- Danna, T.F., see Randerath, K. (275) 355
- D'Aquino, M., see Carballo, M. (279) 245
- Darroudi, F., Farooqi, Z., Benova, D. and Natarajan, A.T.  
The mouse splenocyte assay, an in vivo/in vitro system for biological monitoring: studies with X-rays, fission neutrons and bleomycin (272) 237
- Das, R.K., see Dash, B.C. (280) 45
- Das, S.K., see Sinsheimer, J.E. (268) 255
- Dash, B.C. and Das, R.K.  
Genotoxicity of 'gudakhu', a tobacco preparation. I. In mice in vivo (280) 45
- Dashwood, R., see Bailey, G. (267) 243
- Daubèze, M., see Decoudu, S. (269) 269
- Daugel-Dauge, N.O., see Korkina, L.G. (265) 245
- Davies, M.J., Lovell, D.P. and Anderson, D.  
Thioguanine-resistant mutant frequency in T-lymphocytes from a healthy human population (265) 165
- Davies, R.J.H., see Willems, M.I. (278) 227
- Davini, T., see Betti, C. (281) 255
- Daza, P., Escalza, P., Mateos, S. and Cortés, F.  
Mitomycin C, 4-nitroquinoline-1-oxide and ethyl methane-sulfonate induce long-lived lesions in DNA which result in SCEs during successive cell cycles in human lymphocytes (270) 177
- Dean, R.T., Gebicki, J., Gieseg, S., Grant, A.J. and Simpson, J.A.  
Hypothesis: a damaging role in aging for reactive protein oxidation products? (275) 387
- De Andrade, H.H.R., Santos, J.H., Gimmler-Luz, M.C., Correa, M.J.F., Lehmann, M. and Reguly, M.L.  
Suppressing effect of vanillin on chromosome aberrations that occur spontaneously or are induced by mitomycin C in the germ cell line of *Drosophila melanogaster* (279) 281
- Debatisse, M., see Toledo, F. (276) 261
- Debnath, A.K., see Smith, C. (279) 61
- De Cock, J.G.R., Klink, E.C., Lohman, P.H.M. and Eeken, J.C.J.  
Absence of strand-specific repair of cyclobutane pyrimidine dimers in active genes in *Drosophila melanogaster* Kc cells (274) 85
- Decoudu, S., Cassand, P., Daubèze, M., Frayssinet, C. and Narbonne, J.F.  
Effect of vitamin A dietary intake on in vitro and in vivo activation of aflatoxin B<sub>1</sub> (269) 269
- Deering, R.A., see Bronner, C.E. (274) 187
- De Flora, S., Bronzetti, G. and Sobels, F.H.  
Assessment of antimutagenicity and anticarcinogenicity (267) 153
- De Flora, S., Camoirano, A., D'Agostini, F. and Balansky, R.  
Modulation of the mutagenic response in prokaryotes (267) 183
- Degawa, M., see Kojima, M. (274) 65
- Deknudt, G., see Vanparys, P. (282) 191

- Delaney, S., see Szekely, J.G. (280) 187
- De la Rosa, M.E., see Zimmering, S. (281) 169
- Delclos, K.B. and Heflich, R.H.  
Mutation induction and DNA adduct formation in Chinese hamster ovary cells treated with 6-nitrochrysene, 6-aminochrysene and their metabolites (279) 153
- Deleener, A., see Van Hummelen, P. (271) 13
- Della Croce, C., see Galli, A. (282) 55
- Della Croce, C., see Bronzetti, G. (267) 193
- De Marco, A., De Simone, C., Raglione, M., Testa, A. and Trinca, S.  
Importance of the type of soil for the induction of micronuclei and the growth of primary roots of *Vicia faba* treated with the herbicides atrazine, glyphosate and maleic hydrazide (279) 9
- DeMarini, D.M. and Lawrence, B.K.  
Prophage induction by DNA topoisomerase II poisons and reactive-oxygen species: Role of DNA breaks (267) 1
- De Meester, C., see Brams, A. (280) 103
- Demerseman, P., see Castelain, P. (280) 9
- De Meyer, R., see Masumbuko, M.B. (282) 3
- Demidova, N.S., see Kopnin, B.P. (276) 163
- Demopoulos, N., see Sorsa, M. (271) 261
- Dennett, X., see Byrne, E. (275) 125
- Denny, W.A., see Ferguson, L.R. (265) 181
- Denny, W.A., see Iwamoto, Y. (280) 233
- Depasse, F., see Benning, V. (280) 137
- De Serres, F.J., Overton, L.K. and Sadler, B.M.  
X-Ray-induced specific-locus mutations in the *ad-3* region of two-component heterokaryons of *Neurospora crassa* X. Heterozygous effects of multilocus deletion mutations of genotype *ad-3A* or *ad-3B* (267) 105
- De Serres, F.J., Overton, L.K. and Sadler, B.M.  
X-Ray-induced specific-locus mutations in the *ad-3* region of two-component heterokaryons of *Neurospora crassa* XI. Heterozygous effects of gene/point mutations of genotype *ad-3A* or *ad-3B* (269) 149
- De Serres, F.J., see Brusick, D.J. (266) 1
- De Simone, C., see De Marco, A. (279) 9
- De Waziers, I., see Carrière, V. (268) 11
- Dhesi, J.S. and Sandhu, S.S.  
Application of a wheat seedling assay for detecting aneuploidy induced by *N*-ethyl-*N*-nitrosourea and 4-nitroquinoline-1-oxide (270) 79
- Dianov, G.L., see Salganik, R.I. (266) 163
- Di Leonardo, A., Maddalena, A. and Cavolina, P.  
Nalidixic acid-resistant V79 cells with reduced DNA topoisomerase II activity and amplification prone phenotype (269) 319
- Dimitrović, B., see Fučić, A. (281) 129
- Dimitrović, B., see Fučić, A. (282) 265
- D'Incalci, M., see Pardini, C. (283) 125
- Di Palermo, G., see Monaco, M. (282) 235
- Dixon, K., see Carty, M.P. (274) 29
- Dizdaroglu, M.  
Oxidative damage to DNA in mammalian chromatin (275) 331
- Doerr, C.L., see Kligerman, A.D. (280) 35
- Dogliotti, E., see Benigni, R. (267) 77
- Dohi, K., see Kushiro, J.-i. (272) 17
- Dolanská, M., see Kučerová, M. (278) 19
- Dolara, P., Salvadori, M., Capobianco, T. and Torricelli, F.  
Sister-chromatid exchanges in human lymphocytes induced by dimethoate, omethoate, deltamethrin, benomyl and their mixture (283) 113
- Dominici, R., see Monaco, M. (282) 235
- Doolittle, D.J., see Smith, C. (279) 61
- Dorado, L., Ruiz Montoya, M. and Rodríguez Mellado, J.M.  
A contribution to the study of the structure-mutagenicity relationship for  $\alpha$ -dicarbonyl compounds using the Ames test (269) 301
- Douglas, G., see Claxton, L.D. (276) 23
- Douglas, G., see Claxton, L.D. (276) 61
- Douglas, G.R., see Savard, S. (276) 101
- Dozi-Vassiliades, J., see Kourakis, A. (279) 145
- Dresp, J.H., see Kirkland, D.J. (279) 181
- Dubois, G., see Willems, M.I. (278) 227
- Duce, F., see Sinues, B. (280) 271
- Dúhová, V., see Miadoková, E. (280) 161
- Duker, N.J., see Ganguly, T. (275) 87
- Dunipace, A.J., Beaven, R., Noblitt, T., Li, Y., Zunt, S. and Stookey, G.  
Mutagenic potential of toluidine blue evaluated in the Ames test (279) 255
- Durnev, A.D., see Korkina, L.G. (265) 245
- Duverger, M., see Jacono, F.L. (268) 21
- Earl, R., see Tawn, E.J. (283) 69
- Edler, L.  
Statistical methods for short-term tests in genetic toxicology: The first fifteen years (277) 11
- Edwards, A.A., see Al-Sabti, K. (280) 215
- Edwards, B.S., see Kusewitt, D.F. (274) 163
- Eeken, J.C.J., see De Cock, J.G.R. (274) 85
- Ehling, U.H. and Neuhäuser-Klaus, A.  
Reevaluation of the induction of specific-locus mutations in spermatogonia of the mouse by acrylamide (283) 185
- Ehrenberg, L., see Näslund, M. (282) 203
- Eichenbaum, Z., see Skaliter, R. (267) 139
- Einiö, P., see Nylund, L. (272) 205
- Eker, A.P.M., Vermeulen, W., Miura, N., Tanaka, K., Jaspers, N.G.J., Hoeijmakers, J.H.J. and Bootsma, D.  
Xeroderma pigmentosum group A correcting protein from calf thymus (274) 211
- Eker, A.P.M., see Yasui, A. (273) 231
- Eling, T.E., see Thompson, D.C. (279) 83
- Elliott, B.M., see Mackay, J.M. (271) 97
- Endo, O., see Goto, S. (276) 93
- Endo, O., see Matsushita, H. (271) 1
- Endo, T., see Matsushita, H. (271) 1
- Endoh, K., see Kyoizumi, S. (265) 173
- Engelhart, G., see Jung, R. (278) 265
- Epe, B., see Poot, M. (270) 185
- Erb, F., see Le Curieux, F. (283) 157
- Erdtmann, B., see Gimmler-Luz, M.C. (279) 227
- Erexson, G.L., see Kligerman, A.D. (280) 35
- Erlanger, B.F., see Chen, B.-X. (273) 253
- Escalza, P., see Daza, P. (270) 177



- Escot, C., see Gaudray, P. (276) 317
- Esposito, G., see Pontecorvo, G. (266) 93
- Eubanks, J., see Shiloh, Y. (276) 329
- Evans, G., see Shiloh, Y. (276) 329
- Falezza, A., see Barale, R. (271) 223
- Fält, S., see Andersson, B. (269) 129
- Farooqi, Z. and Kesavan, P.C.  
Radioprotection by caffeine pre- and post-treatment in the bone marrow chromosomes of mice given whole-body  $\gamma$ -irradiation (269) 225
- Farooqi, Z., see Darroudi, F. (272) 237
- Favier, A., see Cadet, J. (275) 343
- Fekete, A., see Fuscoe, J.C. (269) 171
- Felton, C.F., see Barnett, L.B. (282) 127
- Felton, J.S., see Hatch, F.T. (271) 269
- Felton, J.S., see Skog, K. (268) 191
- Felzenszwalb, I., Boiteux, S. and Laval, J.  
Molecular cloning and DNA sequencing of the *radC* gene of *Escherichia coli* K-12 (273) 263
- Fenech, M. and Neville, S.  
Micronucleus induction in bone-marrow cells following consumption of cooked beef in mice. Preliminary investigations (281) 3
- Ferguson, L.R. and Pearson, A.  
Chromosomal changes in Chinese hamster AA8 cells caused by podophyllin, a common treatment for genital warts (266) 231
- Ferguson, L.R. and Von Borstel, R.C.  
Induction of the cytoplasmic 'petite' mutation by chemical and physical agents in *Saccharomyces cerevisiae* (265) 103
- Ferguson, L.R., Berriman, J., Pearson, A., Munday, R., Fowke, E.A. and Towers, N.R.  
In vitro and in vivo mutagenicity studies on sporidesmin, the toxin associated with facial eczema in ruminants (268) 199
- Ferguson, L.R., Turner, P.M., Pogai, H. and Denny, W.A.  
Modulation of mutagenic properties in a series of DNA-directed alkylating agents by variation of chain length and alkylator reactivity (265) 181
- Ferguson, L.R., see Iwamoto, Y. (268) 35
- Ferguson, L.R., see Iwamoto, Y. (280) 233
- Fernández, S.I., see Rojas, A. (282) 209
- Ferraro, P., see Celotti, L. (281) 17
- Festy, B., see Courtois, Y.A. (276) 133
- Festy, B., see Min, S. (280) 225
- Fiedler, R., see Krishna, G. (282) 159
- Fiedler, R., see Krishna, G. (282) 79
- Fink, L., see Schwartz, J.L. (282) 13
- Fiorani, M., Cantoni, O., Sestili, P., Conti, R., Nicolini, P., Vetrano, F. and Dachà, M.  
Electric and/or magnetic field effects on DNA structure and function in cultured human cells (282) 25
- Fiorio, R., see Galli, A. (282) 55
- Fleming, J.E., Reveillaud, I. and Niedzwiecki, A.  
Role of oxidative stress in *Drosophila* aging (275) 267
- Foiles, P.G., Peterson, L.A., Miglietta, L.M. and Ronai, Z.  
Analysis of mutagenic activity and ability to induce replication of polyoma DNA sequences by different model metabolites of the carcinogenic tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (279) 91
- Fontyne-Branchard, M.C., see Proust, J. (268) 265
- Foresti, M., Gaudio, L. and Geraci, G.  
Selective gene mutation in MEL cells (265) 195
- Fowke, E.A., see Ferguson, L.R. (268) 199
- Fracasso, F., see Gadaleta, M.N. (275) 181
- Franekić, J., see Pavlica, M. (281) 277
- Frayssinet, C., see Decoudu, S. (269) 269
- Frei, H., Clements, J., Howe, D. and Würigler, F.E.  
The genotoxicity of the anti-cancer drug mitoxantrone in somatic and germ cells of *Drosophila melanogaster* (279) 21
- Frenkel, K., see Patel, U. (283) 145
- Freund, M.M., see Masumbuko, M.B. (282) 3
- Froelich, R., see Schulte, P.A. (278) 237
- Fu, P.P., see Yu, S. (283) 45
- Fuchs, R.P.D., see Lehmann, A.R. (273) 1
- Fuchs, S.Y., Safaev, R.D., Khovanova, E.M., Ugnivenko, H.G., Spiegelman, V.S., Lytcheva, T.A., Khitrovo, I.A. and Belitsky, G.A.  
A *Drosophila simulans* mutant strain sensitive to benzo[a]pyrene and 2-acetylaminofluorene (268) 155
- Fuchs, S.Y., Spiegelman, V.S., Safaev, R.D. and Belitsky, G.A.  
Xenobiotic-metabolizing enzymes and benzo[a]pyrene metabolism in the benzo[a]pyrene-sensitive mutant strain of *Drosophila simulans* (269) 185
- Fučić, A., Garaj-Vrhovac, V., Dimitrović, B. and Škara, M.  
The persistence of sister-chromatid exchange frequencies in men occupationally exposed to vinyl chloride monomer (281) 129
- Fučić, A., Garaj-Vrhovac, V., Škara, M. and Dimitrović, B.  
X-Rays, microwaves and vinyl chloride monomer: their clastogenic and aneugenic activity, using the micronucleus assay on human lymphocytes (282) 265
- Fučić, A., see Kubelka, D. (283) 169
- Fučić, A., see Garaj-Vrhovac, V. (281) 181
- Fujimori, A., Tachibana, A. and Tatsumi, K.  
Allelic losses in mutations at the *aprt* locus of human lymphoblastoid cells (269) 55
- Fujino, Y., see Sugiyama, C. (278) 117
- Fujioka, E., see Hara, M. (278) 175
- Fujita, S., see Kyoizumi, S. (265) 173
- Fukuda, I., see Morita, T. (268) 297
- Fukuhara, K., see Sera, N. (280) 81
- Fukushima, S., Ogawa, H. and Sasagawa, S.  
Effects of mutagens on the clonal lifespan of *Paramecium tetraurelia* (275) 41
- Fukuta, H., Ohi, H., Uchida, T., Komori, M., Kitada, M. and Kamataki, T.  
Toxicological significance of dog liver cytochrome P-450: examination with the enzyme expressed in *Saccharomyces cerevisiae* using recombinant expression plasmid (269) 97
- Fuller, G.N. and Bigner, S.H.  
Amplified cellular oncogenes in neoplasms of the human central nervous system (276) 299
- Funae, Y., see Imaoka, S. (269) 231

- Funk, J., see Cherry, L.M. (275) 57
- Funk, W.D., see Shay, J.W. (277) 163
- Furihata, C., see Tepsuwan, A. (281) 55
- Furukawa, A., see Ohuchida, A. (278) 139
- Fusco, J.C., Zimmerman, L.J., Fekete, A., Woodrow Setzer, R. and Rossiter, B.J.F.  
Analysis of X-ray-induced HPRT mutations in CHO cells: Insertion and deletions (269) 171
- Fusco, J.C., Zimmerman, L.J., Harrington-Brock, K. and Moore, M.M.  
Large deletions are tolerated at the *hprt* locus of in vivo derived human T-lymphocytes (283) 255
- Fusco, J.C., Zimmerman, L.J., Harrington-Brock, K., Burnette, L., Moore, M.M., Nicklas, J.A., O'Neill, J.P. and Albertini, R.J.  
V(D)J recombinase-mediated deletion of the *hprt* gene in T-lymphocytes from adult humans (283) 13
- Gábelová, A., see Slameňová, D. (279) 109
- Gadaleta, M.N., Rainaldi, G., Lezza, A.M.S., Milella, F., Fracasso, F. and Cantatore, P.  
Mitochondrial DNA copy number and mitochondrial DNA deletion in adult and senescent rats (275) 181
- Galicía, F., see Gómez-Arroyo, S. (281) 173
- Galli, A., Della Croce, C., Minnucci, S., Fiorio, R. and Bronzetti, G.  
Influence of cinnamaldehyde on UV-induced gene conversion and point mutation in yeast: effect on protein synthesis (282) 55
- Galli, A., see Bronzetti, G. (267) 193
- Galli, A., see Monaco, M. (282) 235
- Galloway, S.M., see Armstrong, M.J. (265) 45
- Galloway, S.M., see Bean, C.L. (265) 31
- Gamo, S., see Megumi, T. (274) 73
- Gandalovičová, D., see Sýkora, I. (266) 291
- Ganguly, T. and Duker, N.J.  
Reduced 5-hydroxymethyluracil-DNA glycosylase activity in Werner's syndrome cells (275) 87
- Ganguly (Ghosh), B.B., Talukdar, G. and Sharma, A.  
Cytotoxicity of tin on human peripheral lymphocytes in vitro (282) 61
- Garaj-Vrhovac, V., Fučić, A. and Horvat, Đ.  
The correlation between the frequency of micronuclei and specific chromosome aberrations in human lymphocytes exposed to microwave radiation in vitro (281) 181
- Garaj-Vrhovac, V., see Fučić, A. (281) 129
- Garaj-Vrhovac, V., see Fučić, A. (282) 265
- Garajová, Ľ., see Miadoková, E. (280) 161
- García, E., Lopez-de-Cerain, A., Martinez-Merino, V. and Monge, A.  
Quantitative structure-mutagenic activity relationships of triazino indole derivatives (268) 1
- Garcia, S., see Arenaz, P. (280) 109
- Garner, C., see Sorsá, M. (271) 261
- Garner, R.C., see Routledge, M.N. (282) 139
- Garza, A., see Schulte, P.A. (278) 237
- Gaspar, J., see Rueff, J. (265) 75
- Gaspar, J., see Rueff, J. (269) 243
- Gatehouse, D., see Westmoreland, C. (281) 163
- Gaudio, L., see Foresti, M. (265) 195
- Gaudray, P., Szepietowski, P., Escot, C., Birnbaum, D. and Theillet, C.  
DNA amplification at 11q13 in human cancer: from complexity to perplexity (276) 317
- Gavitt, N.E., see Babson, J.R. (269) 73
- Gebhart, E.  
Anticlastogenicity in cultured mammalian cells (267) 211
- Gebicki, J., see Dean, R.T. (275) 387
- Gentile, J.M., see Anwar, W. (272) 83
- Geraci, G., see Foresti, M. (265) 195
- Gerloff, C., see Kirkland, D.J. (279) 181
- Ghosal, A. and Iba, M.M.  
Enhancement by butylated hydroxytoluene of the in vitro activation of 3,3'-dichlorobenzidine (278) 31
- Giacomelli, L., see Ballarin, C. (280) 1
- Giacomoni, P., see Brandi, G. (281) 157
- Giacomoni, P., see Cadet, J. (275) 343
- Giacomoni, P.U., see Marrot, L. (275) 69
- Gibson, B.J., see Barnett, L.B. (282) 127
- Giehner, T., Langebartels, C. and Sandermann Jr., H.  
Ozone is not mutagenic in the *Tradescantia* and tobacco mutagenicity assays (281) 203
- Gieseg, S., see Dean, R.T. (275) 387
- Gilbertson, L.A., see Montelone, B.A. (267) 55
- Giliani, S., see Stefanini, M. (273) 119
- Gill, B.S. and Sandhu, S.S.  
Application of the *Tradescantia* micronucleus assay for the genetic evaluation of chemical mixtures in soil and aqueous media (270) 65
- Gille, J.J.P. and Joenje, H.  
Cell culture models for oxidative stress: superoxide and hydrogen peroxide versus normobaric hyperoxia (275) 405
- Gille, J.J.P., Van Berkel, C.G.M. and Joenje, H.  
Effect of iron chelators on the cytotoxic and genotoxic action of hyperoxia in Chinese hamster ovary cells (275) 31
- Gimmler-Luz, M.C., Erdtmann, B. and Balbueno, R.A.  
Analysis of clastogenic effect of Porto Alegre drinking water supplies on mouse bone marrow cells (279) 227
- Gimmler-Luz, M.C., see De Andrade, H.H.R. (279) 281
- Gingerich, J.D., see Heddle, J.A. (272) 195
- Giorgi, R., see Casati, A. (275) 7
- Giorgi-Renault, S., see Min, S. (280) 225
- Giphart-Gassler, M., see Roelofs, H. (276) 241
- Giri, A.K., Sai Sivam, S. and Khan, K.A.  
Sister-chromatid exchange and chromosome aberrations induced by paracetamol in vivo in bone-marrow cells of mice (278) 253
- Giri, A.K.  
Genetic toxicology of propylene oxide and trichloropropylene oxide - a review (277) 1
- Giroux, C., see Montelone, B.A. (267) 55
- Giuliani, A., see Benigni, R. (266) 71
- Glatt, H., Anklaam, E. and Robertson, L.W.  
Biphenyl and fluorinated derivatives: liver enzyme-mediated mutagenicity detected in *Salmonella typhimurium* and Chinese hamster V79 cells (281) 151
- Glickman, B.W., see Sage, E. (269) 285
- Gocke, E., see Kirkland, D.J. (279) 181



- Godfrey, D.B., Bouffler, S.D., Musk, S.R.R., Raman, M.J. and Johnson, R.T.  
Mammalian cells share a common pathway for the relief of DNA replication arrest by  $O^6$ -alkyl guanine, incorporated 6-thioguanine and UV photoproducts (274) 225
- Goin, C.J., see Mayer, V.W. (279) 41
- Gómez-Arroyo, S., Noriega-Aldana, N., Osorio, A., Galicia, F., Ling, S. and Villalobos-Pietrini, R.  
Sister-chromatid exchange analysis in a rural population of Mexico exposed to pesticides (281) 173
- Gonsebatt, M.E., Vega, L., Herrera, L.A., Montero, R., Rojas, E., Cebrián, M.E. and Ostrosky-Wegman, P.  
Inorganic arsenic effects on human lymphocyte stimulation and proliferation (283) 91
- Gonsebatt, M.E., see Herrera, L.A. (270) 211
- Gonsebatt, M.E., see Rojas, E. (282) 283
- González, C., see Betancourt, M. (283) 173
- González, G., see Morales-Ramírez, P. (279) 269
- Gooch, P.C., see Bender, M.A. (281) 227
- Gooch, P.C., see Bender, M.A. (283) 87
- Goodwin, M., see Szekely, J.G. (280) 187
- Gopalan, H.N.G., see Lewtas, J. (276) 3
- Gorgels, W.J.M.J., Van Poppel, G., Jarvis, M.J., Stenhuis, W. and Kok, F.J.  
Passive smoking and sister-chromatid exchanges in lymphocytes (279) 233
- Gorse Jr., R.A., see Montreuil, C.N. (282) 89
- Goto, S., Endo, O. and Matsushita, H.  
Results of a comparative study on the Salmonella pre-incubation and plate incorporation assays using test samples from the IPCS collaborative study (276) 93
- Goto, S., see Claxton, L.D. (276) 23
- Goto, S., see Matsushita, H. (271) 1
- Gotteland, M., see Proust, J. (268) 265
- Graf, U. and Van Schaik, N.  
Improved high bioactivation cross for the wing somatic mutation and recombination test in *Drosophila melanogaster* (271) 59
- Graf, U., Heo, O.-S. and Ramirez, O.O.  
The genotoxicity of chromium(VI) oxide in the wing spot test of *Drosophila melanogaster* is over 90% due to mitotic recombination (266) 197
- Granella, M. and Clonfero, E.  
Sensitivity of different bacterial assays in detecting mutagens in urine of humans exposed to polycyclic aromatic hydrocarbons (268) 131
- Grant, A.J., see Dean, R.T. (275) 387
- Grant, W.F., Lee, H.G., Logan, D.M. and Salamone, M.F.  
The use of Tradescantia and *Vicia faba* bioassays for the in situ detection of mutagens in an aquatic environment (270) 53
- Green, M.H.L., Lowe, J.E., Harcourt, S.A., Akinluyi, P., Rowe, T., Cole, J., Anstey, A.V. and Arlett, C.F.  
UV-C sensitivity of unstimulated and stimulated human lymphocytes from normal and xeroderma pigmentosum donors in the comet assay: A potential diagnostic technique (273) 137
- Green, M.H.L., see Arlett, C.F. (273) 127
- Green, M.H.L., see Cole, J. (273) 171
- Greenstein, M., see Osburne, M.S. (274) 79
- Gregor, V., see Kučerová, M. (278) 19
- Griffith, C.S., see Balter, H. (267) 31
- Griffith, J., see Schulte, P.A. (278) 237
- Griffith, J.D., see Uziel, M. (277) 35
- Grigoriadou, M., see Sarri, C. (270) 125
- Grist, S.A., McCarron, M., Kutlaca, A., Turner, D.R. and Morley, A.A.  
In vivo human somatic mutation: frequency and spectrum with age (266) 189
- Groenendijk, R.H., see Van Loon, A.A.W.M. (274) 19
- Grolmus, J., see Miadoková, E. (280) 161
- Gu, Z.-W., Whong, W.-Z., Wallace, W.E. and Ong, T.-m.  
Induction of micronuclei in BALB/c-3T3 cells by selected chemicals and complex mixtures (279) 217
- Gu, Z.-W., Zhong, B.-Z., Nath, B., Whong, W.-Z., Wallace, W.E. and Ong, T.-M.  
Micronucleus induction and phagocytosis in mammalian cells treated with diesel emission particles (279) 55
- Gubenko, I.S. and Subbota, R.P.  
Characterization of the progeny of X-ray irradiated males from two *Drosophila virilis* strains differing in genetic instability (282) 197
- Gudi, R., see Witt, K.L. (283) 53
- Gulati, D.K., see Schulte, P.A. (278) 237
- Gunter, L.E., see Hornsby, P.J. (275) 13
- Gürtler, R., see Von der Hude, W. (278) 289
- Gutman, M., see Shiloh, Y. (276) 329
- Guzman, J., see Zimmering, S. (281) 169
- Hagiwara, T., see Asano, N. (278) 153
- Hain, J., Jaussi, R. and Burkart, W.  
Lack of adaptive response to low doses of ionizing radiation in human lymphocytes from five different donors (283) 137
- Hajos, A.K.D., see Winston, G.W. (279) 289
- Hakala, E., see Nylund, L. (276) 125
- Hall, A., see Robson, T. (274) 177
- Halperin, W.E., see Schulte, P.A. (278) 237
- Hamada, K. and Mizuno, K.  
Analysis of chromosome aberrations induced by U5 RNA (267) 97
- Hamasaki, T., Sato, T., Nagase, H. and Kito, H.  
The genotoxicity of organotin compounds in SOS chromotest and rec-assay (280) 195
- Hämeilä, M., see Nylund, L. (265) 223
- Hamilton, L., see Willems, M.I. (278) 227
- Hamlin, J.L.  
Amplification of the dihydrofolate reductase gene in methotrexate-resistant Chinese hamster cells (276) 179
- Han, J.-S.  
Effects of various chemical compounds on spontaneous and hydrogen peroxide-induced reversion in strain TA104 of *Salmonella typhimurium* (266) 77
- Hanawalt, P., see McKay, M. (274) 157
- Hanawalt, P.C., see Christians, F.C. (274) 93
- Hang, B., see Lambert, M.W. (273) 57
- Hanna, P.E., see Babson, J.R. (269) 73
- Hansch, C., see Kumar Debnath, A. (280) 55

- Hansch, C., see Smith, C. (279) 61
- Hansteen, I.-L., see Jelmert, Ø. (271) 289
- Hara, M., Nakagawa, S., Fujioka, E., Ayukawa, E. and Izushi, T.  
Detection of micronuclei in peripheral blood of mitomycin C-treated mice using supravital staining with acridine orange (278) 175
- Hara, T., see Hitotsumachi, S. (278) 113
- Harcourt, S.A., see Arlett, C.F. (273) 127
- Harcourt, S.A., see Green, M.H.L. (273) 137
- Harger, W.P., see Arey, J. (281) 67
- Harjulehto-Mervaala, T., Salonen, R., Aro, T. and Saxén, L.  
The accident at Chernobyl and trisomy 21 in Finland (275) 81
- Harman, D.  
Free radical theory of aging (275) 257
- Harrington-Brock, K., see Fuscoe, J.C. (283) 13
- Harrington-Brock, K., see Fuscoe, J.C. (283) 255
- Harris, P.V., see Sakaguchi, K. (274) 11
- Hart, J., see Nielsen, P.A. (278) 215
- Hasegawa, R., see Sai, K. (269) 113
- Hashimoto, Y., see Kojima, M. (274) 65
- Hatakeyama, Y., Nakajima, E., Atai, H. and Suzuki, S.  
Effects of benzene in a micronucleus test on peripheral blood utilizing acridine orange-coated slides (278) 193
- Hatanaka, Y., Kitagawa, Y., Toyoda, Y., Kawata, T., Ando, N., Kawabata, Y., Iwai, M. and Arimura, H.  
Micronucleus test with cyclophosphamide using mouse peripheral blood reticulocytes (278) 99
- Hatanaka, Y., see Kako, Y. (282) 119
- Hatch, F.T., Knize, M.G., Moore II, D.H. and Felton, J.S.  
Quantitative correlation of mutagenic and carcinogenic potencies for heterocyclic amines from cooked foods and additional aromatic amines (271) 269
- Hatch-Pigott, V., see Arroyo, P.L. (281) 193
- Hattori, C., see Shimada, H. (278) 165
- Hautefeuille, A., see Chen, C.S. (265) 211
- Hayashi, M., Kodama, Y., Awogi, T., Suzuki, T., Asita, A.O. and Sofuni, T.  
The micronucleus assay using peripheral blood reticulocytes from mitomycin C- and cyclophosphamide-treated rats (278) 209
- Hayashi, M., see Asita, A.O. (271) 29
- Hayashi, M., see Iwakura, K. (278) 131
- Hayashi, M., see Kishi, M. (278) 205
- Hayashi, M., see Kondo, Y. (278) 187
- Hayashi, M., see Matsuoka, A. (272) 223
- Hayashi, M., see Sai, K. (269) 113
- Hayashi, M., see Suzuki, T. (278) 169
- Hayatsu, H., see Arimoto, S. (282) 177
- Hayatsu, H., see Matsumoto, K. (268) 59
- Heddle, J.A., Gingerich, J.D., Urlando, C., Pagura, M., Shep-son, P. and Khan, M.A.  
Detection of somatic mutations in vivo in lung fibroblasts, I. Spontaneous frequencies in Chinese hamsters and F344 rats (272) 195
- Heflich, R.H., see Delclos, K.B. (279) 153
- Heikkilä, P., see Nylund, L. (265) 223
- Heirbaut, P.R.C.M., see Van Erp, Y.H.M. (271) 201
- Helissey, P., see Min, S. (280) 225
- Hellmér, L. and Bolcsfoldi, G.  
An evaluation of the *E. coli* K-12 *uvrB/recA* DNA repair host-mediated assay. I. In vitro sensitivity of the bacteria to 61 compounds (272) 145
- Hellmér, L. and Bolcsfoldi, G.  
An evaluation of the *E. coli* K-12 *uvrB/recA* DNA repair host-mediated assay. II. In vivo results for 36 compounds tested in the mouse (272) 161
- Hellmér, L., see Bolcsfoldi, G. (279) 223
- Helmig, D., see Arey, J. (281) 67
- Hendricks, J., see Bailey, G. (267) 243
- Hendrickx, B., see Castelain, P. (280) 9
- Heo, M.Y., see Hoyos, L.S. (280) 29
- Heo, O.-S., see Graf, U. (266) 197
- Herbold, B.A., see Bomhard, E.M. (277) 187
- Herbolt, B., see Jung, R. (278) 265
- Herreno-Saenz, D., see Yu, S. (283) 45
- Herrera, L.A., Montero, R., León-Cázares, J.M., Rojas, E., Gonsebatt, M.E. and Ostrosky-Wegman, P.  
Effects of progesterone and estradiol on the proliferation of phytohemagglutinin-stimulated human lymphocytes (270) 211
- Herrera, L.A., see Gonsebatt, M.E. (283) 91
- Herrera, L.A., see Rojas, E. (282) 283
- Herrick, R., see Schulte, P.A. (278) 237
- Higashikuni, N., Baba, T., Nakamura, T. and Sutou, S.  
The micronucleus test with peripheral reticulocytes from phenacetin-treated mice (278) 159
- Higurashi, M., see Takeshita, T. (275) 21
- Higurashi, M., see Wu, F.-y. (283) 65
- Hirabayashi, K., see Kasahara, Y. (278) 145
- Hirabayashi, K., see Kasahara, Y. (280) 117
- Hirai, Y., see Kushiro, J.-i. (272) 17
- Hirai, Y., see Kyoizumi, S. (265) 173
- Hiramoto, K., see Kato, T. (268) 105
- Hirayama, T., see Watanabe, T. (281) 247
- Hirayama, T., see Watanabe, T. (283) 35
- Hirono, H., see Yamamura, E. (278) 127
- Hitotsumachi, S., Kimura, Y., Katoh, M., Ishihara, N., Hara, T. and Shibuya, T.  
Micronucleus tests on *N*-ethyl-*N*-nitrosourea with mouse peripheral blood reticulocytes using acridine orange-coated slides (278) 113
- Hiwatashi, T., see Suzuki, T. (278) 169
- Ho, T.A., Coutts, T.M., Rowland, I.R. and Alldrick, A.J.  
Inhibition of the metabolism of mutagens occurring in food by arachidonic acid (269) 279
- Hoehn, H., see Poot, M. (270) 185
- Hoeijmakers, J.H.J., see Eker, A.P.M. (274) 211
- Hoeijmakers, J.H.J., see Lehmann, A.R. (273) 1
- Holmes, G.E., Bernstein, C. and Bernstein, H.  
Oxidative and other DNA damages as the basis of aging: a review (275) 305
- Honda, S., see Kondo, Y. (278) 187
- Hongyu, Y. and Zili, Z.  
Some factors affecting sister-chromatid differentiation (SCD) and sister-chromatid exchange (SCE) in *Hordeum vulgare* (272) 125



- Hooberman, B.H., see Sinsheimer, J.E. (268) 255
- Horáček, J., see Kučerová, M. (278) 19
- Horiguchi, Y., see Kishi, M. (278) 205
- Horikawa, K., see Sera, N. (280) 81
- Horikawa, K., see Tokiwa, H. (276) 139
- Hořínová, Z., see Rubeš, J. (283) 199
- Hornsby, P.J., Yang, L. and Gunter, L.E.  
Demethylation of satellite I DNA during senescence of bovine adrenocortical cells in culture (275) 13
- Horvat, Đ., see Garaj-Vrhovac, V. (281) 181
- Horvat, Đ., see Osmak, M. (282) 259
- Hoshino, H., see Takeshita, T. (275) 21
- Houk, V.S.  
The genotoxicity of industrial wastes and effluents. A review (277) 91
- Houldsworth, J., see Shiloh, Y. (276) 329
- Hovig, E., see Smith-Sørensen, B. (269) 41
- Howard, D.R., see Collins, B.W. (281) 287
- Howe, D., see Frei, H. (279) 21
- Hoyer, M.E., Keeler, G.J. and Ball, J.C.  
Detection of oxidative mutagens in an urban air-particulate extract: a preliminary study (283) 295
- Hoyos, L.S., Au, W.W., Heo, M.Y., Morris, D.L. and Legator, M.S.  
Evaluation of the genotoxic effects of a folk medicine, *Petiveria alliacea* (Anamu) (280) 29
- Hozier, J., Applegate, M. and Moore, M.M.  
In vitro mammalian mutagenesis as a model for genetic lesions in human cancer (270) 201
- Hruszkewycz, A.M.  
Lipid peroxidation and mtDNA degeneration. A hypothesis (275) 243
- Hsie, A.W., see An, J. (270) 167
- Hsieh, D.P.H., see Kado, N.Y. (271) 253
- Humphrey, F., see McDiarmid, M.A. (279) 199
- Hunsicker, P.R., see Russell, L.B. (282) 151
- Hunting, D., see Carreau, M. (274) 57
- Hussain, K.O., see Balasem, A.N. (271) 209
- Hutchinson, F.  
Published data on mutagenesis by ionizing radiation of plasmids in solution probably reflect in part the specificity of adventitious transition metal ions complexed to the DNA (281) 261
- Iba, M.M., see Ghosal, A. (278) 31
- Ichikawa, S.  
Tradescantia stamen-hair system as an excellent botanical tester of mutagenicity: its responses to ionizing radiations and chemical mutagens, and some synergistic effects found (270) 3
- Ide, H., see Chen, B.-X. (273) 253
- Iijima, K., see Wu, F.-y. (283) 65
- Iijima, S., see Takeshita, T. (275) 21
- Ikeda, M., see Watanabe, T. (281) 247
- Ikemoto, S., see Imaoka, S. (269) 231
- Ikenaga, M., see Wang, Y. (273) 221
- Iliakis, G., see Cheong, N. (274) 111
- Imaoka, S., Ikemoto, S., Shimada, T. and Funae, Y.  
Mutagenic activation of aflatoxin B<sub>1</sub> by pulmonary, renal, and hepatic cytochrome P450s from rats (269) 231
- Inaba, H., see Kimura, M. (281) 215
- Inoue, K., see Kondo, Y. (278) 187
- Ioannides, C., see Ayrton, A.D. (265) 1
- Ishidate Jr., M.  
Comment on the US EPA recommendation for genotoxicity guidelines on chemicals (272) 79
- Ishidate Jr., M., see Oda, Y. (272) 91
- Ishihara, N., see Hitotsumachi, S. (278) 113
- Ishii, A., see Arimoto, S. (282) 177
- Ishizaki, K., see Wang, Y. (273) 221
- Itoh, S., see Shimada, H. (278) 165
- Iwai, M., see Hatanaka, Y. (278) 99
- Iwakura, K., Tamura, H., Matsumoto, A., Ajimi, S., Ogura, S., Kakimoto, K., Matsumoto, T. and Hayashi, M.  
The micronucleus assay with peripheral blood reticulocytes by acridine orange supravital staining with 1-β-D-arabinofuranosylcytosine (278) 131
- Iwamoto, Y., Ferguson, L.R., Pearson, A. and Baguley, B.C.  
Photo-enhancement of the mutagenicity of 9-anilinoacridine derivatives related to the antitumour agent amsacrine (268) 35
- Iwamoto, Y., Ferguson, L.R., Pogai, H.B., Uzuhashi, T., Kurita, A., Yangihara, Y. and Denny, W.A.  
Mutagenic activities of azido analogues of amsacrine and other 9-anilinoacridines in *Salmonella typhimurium* and their enhancement by photoirradiation (280) 233
- Izushi, T., see Hara, M. (278) 175
- Jäckh, R., see Jung, R. (278) 265
- Jackson, M., see Cheong, N. (274) 111
- Jacob, P.S., see Jagetia, G.C. (280) 87
- Jacobson-Kram, D., see McDiarmid, M.A. (279) 199
- Jacono, F.L., Stecca, C. and Duverger, M.  
Mutagenic activation of benzo[a]pyrene by human red blood cells (268) 21
- Jaen, J.C., see Kropko, M.L. (281) 233
- Jagannath, D.R., see Claxton, L.D. (276) 23
- Jägerstad, M., see Skog, K. (268) 191
- Jagetia, G.C. and Jacob, P.S.  
Vinblastine treatment induces dose-dependent increases in the frequency of micronuclei in mouse bone marrow (280) 87
- Jain, A.K., see Kuroda, Y. (267) 201
- Jain, S., see Taneja, N. (283) 233
- Jansen, J.G., Vrieling, H., Van Zeeland, A.A. and Mohn, G.R.  
The gene encoding hypoxanthine-guanine phosphoribosyltransferase as target for mutational analysis: PCR cloning and sequencing of the cDNA from the rat (266) 105
- Jansson, K. and Jansson, V.  
Genotoxicity of 2,4,6-trichlorophenol in V79 Chinese hamster cells (280) 175
- Jansson, K. and Jansson, V.  
Induction of micronuclei in V79 Chinese hamster cells by tetrachlorohydroquinone, a metabolite of pentachlorophenol (279) 205

- Jansson, V., see Jansson, K. (279) 205  
 Jansson, V., see Jansson, K. (280) 175  
 Järventaas, H., see Norppa, H. (282) 135  
 Järventaas, H., see Sipii, P. (279) 75  
 Jarvis, M.J., see Gorgels, W.J.M.J. (279) 233  
 Jaspers, N.G.J., see Eker, A.P.M. (274) 211  
 Jaussi, R., see Hain, J. (283) 137  
 Jeffreys, A., see Kushiro, J.-i. (272) 17  
 Jelmert, Ø., Hansteen, I.-L. and Langård, S.  
 Enhanced cytogenetic detection of previous in vivo exposure to mutagens in human lymphocytes after treatment with inhibitors of DNA synthesis and DNA repair in vitro (271) 289  
 Jenes, J.E., see Knudsen, L.E. (279) 129  
 Jena, G.B., see Bhunya, S.P. (272) 175  
 Jenkins, D., see Routledge, M.N. (282) 139  
 Jensen, A.A., see Nielsen, P.A. (278) 215  
 Jensen, G.E., see Knudsen, L.E. (279) 129  
 Jensen, J.C., see Knudsen, L.E. (279) 129  
 Joenje, H., see Gille, J.J.P. (275) 31  
 Joenje, H., see Gille, J.J.P. (275) 405  
 Joenje, H., see Lutgerink, J.T. (275) 377  
 Johnson, R.T. and Squires, S.  
 The XPD complementation group. Insights into xeroderma pigmentosum, Cockayne's syndrome and trichothiodystrophy (273) 97  
 Johnson, R.T., see Godfrey, D.B. (274) 225  
 Jones, C.B., see Brunk, U.T. (275) 395  
 Jones, C.J., see Waters, R. (273) 145  
 Jones, N.J., see Waters, R. (273) 145  
 Jones, R.L., see Sheu, C.W. (280) 181  
 Jong, X., see Ma, T.-H. (270) 39  
 Josephy, P.D., see Thompson, D.C. (279) 83  
 Jung, R., Engelhart, G., Herbolt, B., Jäckh, R. and Müller, W.  
 Collaborative study of mutagenicity with *Salmonella typhimurium* TA102 (278) 265  
 Kada, T., see Kuroda, Y. (267) 201  
 Kada, T., see Yokoiyama, A. (268) 247  
 Kadenbach, B., see Müller-Höcker, J. (275) 115  
 Kadlubar, F.F., see Yu, S. (283) 45  
 Kado, N.Y., Wong, J.M., Kuzmicky, P.A., Woodrow, J.E., Ning, H., Seiber, J.N. and Hsieh, D.P.H.  
 Quantitative integration of the *Salmonella* microsuspension assay with supercritical fluid extraction of model airborne vapor-phase mutagens (271) 253  
 Kajii, T., see Kuwano, A. (269) 107  
 Kakimoto, K., see Iwakura, K. (278) 131  
 Kako, Y., Toyoda, Y., Hatanaka, Y., Suwa, Y., Nukaya, H. and Nagao, M.  
 Inhibition of mutagenesis by *p*-aminobenzoic acid as a nitrite scavenger (282) 119  
 Kälén, I., Shephard, S. and Candrian, U.  
 Evaluation of the ligase chain reaction (LCR) for the detection of point mutations (283) 119  
 Kalopissis, G.  
 Structure-activity relationships of aromatic diamines in the Ames *Salmonella typhimurium* assay. Part II (269) 9  
 Kamataki, T., see Fukuta, H. (269) 97  
 Kamataki, T., see Sawada, M. (265) 23  
 Kaminskas, E. and Li, J.C.  
 Repair of DNA damage induced by oxygen radicals in human non-proliferating and proliferating lymphocytes (274) 103  
 Kanaya, N., Takehisa, S., Nicoloff, H., Nikolova, T. and Damianova, V.  
 Plant extracts induce chromosome aberrations and sister-chromatid exchanges in Chinese hamster ovary cells and human lymphocytes (281) 47  
 Karakaya, A.E., see Şardaş, S. (279) 117  
 Kärenlampi, S., see Von Wright, A. (269) 27  
 Kasahara, Y., Nakai, Y., Miura, D., Yagi, K., Hirabayashi, K. and Makita, T.  
 Mechanism of induction of micronuclei and chromosome aberrations in mouse bone marrow by multiple treatments of methotrexate (280) 117  
 Kasahara, Y., Wakata, A., Nakai, Y., Yuno, K., Miura, D., Yagi, K., Hirabayashi, K. and Makita, T.  
 The micronucleus test using peripheral blood reticulocytes from methotrexate-treated mice (278) 145  
 Kasper, P., see Müller, L. (282) 169  
 Kastenbaum, M.A., see Bowman, K.O. (272) 133  
 Kataoka, K., see Claxton, L.D. (276) 23  
 Kato, T., Kojima, K., Hiramoto, K. and Kikugawa, K.  
 DNA strand breakage by hydroxyphenyl radicals generated from mutagenic diazoquinone compounds (268) 105  
 Kato, T., see Kikugawa, K. (268) 65  
 Kato, T., see Romagna, F. (278) 197  
 Kato, T., see Wang, Y. (273) 221  
 Katoh, M., see Hitotsumachi, S. (278) 113  
 Katoh, Y., Maekawa, M. and Sano, Y.  
 Effects of 2-amino-3-methylimidazo[4,5-*f*]quinoline (IQ) on somatic mutation in a soybean test system (279) 239  
 Katz, D.S., see Uziel, M. (277) 35  
 Kaufmann, G., see Müller, L. (282) 169  
 Kawabata, H., see Shimoi, K. (268) 287  
 Kawabata, Y., see Hatanaka, Y. (278) 99  
 Kawakishi, S., see Nakayama, T. (281) 77  
 Kawata, T., see Hatanaka, Y. (278) 99  
 Kazis, A., see Petridou, M. (280) 143  
 Keeler, G.J., see Hoyer, M.E. (283) 295  
 Keen, R.E., see Bagley, S.T. (276) 81  
 Keeney, S., Wein, H. and Linn, S.  
 Biochemical heterogeneity in xeroderma pigmentosum complementation group E (273) 49  
 Kelloff, G.J., Boone, C.W., Malone, W.F. and Steele, V.E.  
 Chemoprevention clinical trials (267) 291  
 Kelloff, G.J., see Boone, C.W. (267) 251  
 Keng, P.C., see Zhu, W. (274) 237  
 Kesavan, P.C., see Farooqi, Z. (269) 225  
 Kevekordes, S., see Mersch-Sundermann, V. (278) 1  
 Khan, K.A., see Giri, A.K. (278) 253  
 Khan, M.A., see Heddle, J.A. (272) 195  
 Khitrovo, I.A., see Fuchs, S.Y. (268) 155  
 Khovanova, E.M., see Fuchs, S.Y. (268) 155  
 Kihlman, B.A. and Andersson, H.C.



- Enhancement and reduction by methylated oxypurines of the frequencies of chromatid aberrations induced by camptothecin in root-tip cells of *Vicia faba* (269) 259
- Kihlman, B.A., see Andersson, H.C. (268) 167
- Kikugawa, K., Kato, T. and Kojima, K.  
Substitution of *p*- and *o*-hydroxyphenyl radicals at the 8 position of purine nucleosides by reaction with mutagenic *p*- and *o*-diazoquinones (268) 65
- Kikugawa, K., see Kato, T. (268) 105
- Kim, T.-W., see Knasmüller, S. (270) 31
- Kim, T.-w., see Ma, T.-H. (270) 71
- Kim, Y.J., see Park, E.-H. (268) 239
- Kimmel, M., Axelrod, D.E. and Wahl, G.M.  
A branching process model of gene amplification following chromosome breakage (276) 225
- Kimura, M., Roschger, P., Kobayashi, M., Kimura, S. and Inaba, H.  
*N*-Methyl-*N'*-nitro-*N*-nitrosoguanidine-induced light emission in Chinese hamster cell cultures: correlation with enhancement of chromosomal aberrations (281) 215
- Kimura, S., see Kimura, M. (281) 215
- Kimura, Y., see Hitotsumachi, S. (278) 113
- Kinae, N., see Ohuchida, A. (278) 139
- Kinae, N., see Sasaki, Y.F. (269) 79
- Kirkland, D.J., Dresch, J.H., Marshall, R.R., Baumeister, M., Gerloff, C. and Gocke, E.  
Normal chromosomal aberration frequencies in peripheral lymphocytes of healthy human volunteers exposed to a maximum daily dose of paracetamol in a double blind trial (279) 181
- Kirsch-Volders, M., see Cornet, M. (271) 213
- Kirsch-Volders, M., see Sorsa, M. (271) 261
- Kirsch-Volders, M., see Van Hummelen, P. (271) 13
- Kishi, M., Horiguchi, Y., Watanabe, S. and Hayashi, M.  
Validation of the mouse peripheral blood micronucleus assay using acridine orange supravital staining with urethane (278) 205
- Kitada, M., see Fukuta, H. (269) 97
- Kitagawa, Y., see Hatanaka, Y. (278) 99
- Kitamura, R., see Sawada, M. (265) 23
- Kitchin, K.T., Brown, J.L. and Kulkarni, A.P.  
Predictive assay for rodent carcinogenicity using in vivo biochemical parameters: operational characteristics and complementarity (266) 253
- Kito, H., see Hamasaki, T. (280) 195
- Kito, H., see Sato, M. (265) 149
- Kleibl, K., Margison, G.P., Škorvaga, M., Brozmanová, J. and Mašek, F.  
A *recA-ada* hybrid gene inducible by DNA damage (282) 39
- Kleibl, K., see Angelis, K. (273) 271
- Klein, C.B., see Cohen, M.D. (269) 141
- Kliesch, U. and Adler, I.-D.  
Sex differences in micronucleus induction with hycanthone methanesulfonate in bone marrow cells of mice (283) 249
- Kligerman, A.D., Allen, J.W., Bryant, M.F., Campbell, J.A., Collins, B.W., Doerr, C.L., Erexson, G.L., Kwanyuen, P. and Morgan, D.L.  
Cytogenetic studies of mice exposed to styrene by inhalation (280) 35
- Klink, E.C., see De Cock, J.G.R. (274) 85
- Klopman, G. and Rosenkranz, H.S.  
Testing by artificial intelligence: Computational alternatives to the determination of mutagenicity (272) 59
- Klopman, G., see Mersch-Sundermann, V. (265) 61
- Klopman, G., see Rosenkranz, H.S. (280) 245
- Klopman, G., see Rosenkranz, H.S. (282) 241
- Klopman, G., see Yang, W.-L. (272) 111
- Knasmüller, S. and Szakmary, A.  
Mutagenic effects of niridazole in animal-mediated and in liquid suspension assays using *Escherichia coli* K-12 as an indicator (280) 93
- Knasmüller, S., Kim, T.-W. and Ma, T.-H.  
Synergistic effect between tannic acid and X-rays detected by the Tradescantia-micronucleus assay (270) 31
- Knize, M.G., see Hatch, F.T. (271) 269
- Knize, M.G., see Skog, K. (268) 191
- Knudsen, L.E., Boisen, T., Christensen, J.M., Jernes, J.E., Jensen, G.E., Jensen, J.C., Lundgren, K., Lundsteen, C., Pedersen, B., Wassermann, K., Wilhardt, P., Wulf, H.C. and Zebitz, U.  
Biomonitoring of genotoxic exposure among stainless steel welders (279) 129
- Kobayashi, H., see Sugiyama, C. (278) 117
- Kobayashi, M., see Kimura, M. (281) 215
- Kobayashi, T., see Yasui, A. (273) 231
- Köberle, B., see Speit, G. (283) 75
- Kodama, Y., see Asita, A.O. (271) 29
- Kodama, Y., see Hayashi, M. (278) 209
- Kodama, Y., see Kushihiro, J.-i. (272) 17
- Kodama, Y., see Suzuki, T. (278) 169
- Kojima, H., Konishi, H. and Kuroda, Y.  
Combined mutagenicity of methyl methanesulfonate and ethyl methanesulfonate in Chinese hamster V79 cells (266) 171
- Kojima, H., Konishi, H. and Kuroda, Y.  
Effects of L-ascorbic acid on the mutagenicity of ethyl methanesulfonate in cultured mammalian cells (266) 85
- Kojima, K., see Kato, T. (268) 105
- Kojima, K., see Kikugawa, K. (268) 65
- Kojima, M., Morita, T., Degawa, M., Hashimoto, Y. and Tada, M.  
Differences in DNA damage induced by mutagenic and nonmutagenic 4-aminoazobenzene derivatives in *Escherichia coli* (274) 65
- Kojima, M., see Yamamura, E. (278) 127
- Kok, F.J., see Gorgels, W.J.M.J. (279) 233
- Kokkinos, G., see Kourakis, A. (279) 145
- Kolar, C., see Lawson, T. (272) 139
- Kolman, A., see Näslund, M. (282) 203
- Kolodner, K., see McDiarmid, M.A. (279) 199
- Komori, M., see Fukuta, H. (269) 97
- Kondo, K. and Ozawa, S.  
Micronucleus test with ethyl methanesulfonate in mouse peripheral blood reticulocytes stained supravitaly using acridine orange-coated slides (278) 109
- Kondo, S., see Satokata, I. (273) 193
- Kondo, Y., Honda, S., Nakajima, M., Miyahana, K., Hayashi, M., Shinagawa, Y., Sato, S., Inoue, K., Nito, S. and Ariyuki, F.



- Micronucleus test with vincristine sulfate and colchicine in peripheral blood reticulocytes of mice using acridine orange supravital staining (278) 187
- Konishi, H., see Kojima, H. (266) 171
- Konishi, H., see Kojima, H. (266) 85
- Konishi, J., see Kyoizumi, S. (265) 173
- Koopmans, M.J.E., see Van Erp, Y.H.M. (271) 201
- Kopnin, B.P., Sokova, O.I. and Demidova, N.S.  
Regularities of karyotypic evolution during stepwise amplification of genes determining drug resistance (276) 163
- Korkina, L.G., Durnev, A.D., Suslova, T.B., Cheremisina, Z.P., Daugel-Dauge, N.O. and Afanas'ev, I.B.  
Oxygen radical-mediated mutagenic effect of asbestos on human lymphocytes: suppression by oxygen radical scavengers (265) 245
- Kotsis, A., see Kourakis, A. (279) 145
- Koumkoumadjian, V.A., see Nersessian, A.K. (268) 211
- Kourakis, A., Mouratidou, M., Kokkinos, G., Barbouti, A., Kotsis, A., Mourelatos, D. and Dozi-Vassiliades, J.  
Frequencies of chromosomal aberrations in pesticide sprayers working in plastic green houses (279) 145
- Kourakis, A., see Petridou, M. (280) 143
- Kow, Y.W., see Chen, B.-X. (273) 253
- Kozubek, S., see Basha, S.G. (267) 133
- Kozubek, S., see Basha, S.G. (269) 237
- Krasavin, E.A., see Basha, S.G. (267) 133
- Krasavin, E.A., see Basha, S.G. (269) 237
- Krewski, D., Leroux, B.G., Creason, J. and Claxton, L.  
Sources of variation in the mutagenic potency of complex chemical mixtures based on the Salmonella/microsome assay (276) 33
- Krewski, D., see Claxton, L.D. (276) 61
- Krewski, D., see Lewtas, J. (276) 3
- Kriek, E., see Paleologo, M. (281) 11
- Krishna, G., Fiedler, R. and Theiss, J.C.  
Simultaneous analysis of chromosome damage and aneuploidy in cytokinesis-blocked V79 Chinese hamster lung cells using an antikinetochore antibody (282) 79
- Krishna, G., Fiedler, R. and Theiss, J.C.  
Simultaneous evaluation of clastogenicity, aneugenicity and toxicity in the mouse micronucleus assay using immunofluorescence (282) 159
- Krishna, G., see Ciaravino, V. (280) 205
- Krivobok, S., Seigle-Murandi, F., Steiman, R., Marzin, D.R. and Betina, V.  
Mutagenicity of substituted anthraquinones in the Ames/Salmonella microsome system (279) 1
- Kropko, M.L., Jaen, J.C., Theiss, J.C., Wold, S., Caprathe, B.W. and Wise, L.D.  
Chemical purity and mutagenicity: Case study of a drug in development (281) 233
- Kropko, M.L., see Ciaravino, V. (280) 205
- Kubelka, D., Fučić, A. and Milković-Kraus, S.  
The value of cytogenetic monitoring versus film dosimetry in the hot zone of a nuclear power plant (283) 169
- Kubo, K., see Chen, B.-X. (273) 253
- Kubota, Y., Shimada, A. and Shima, A.  
Detection of  $\gamma$ -ray-induced DNA damages in malformed dominant lethal embryos of the Japanese medaka (*Oryzias latipes*) using AP-PCR fingerprinting (283) 263
- Kučerová, M., Gregor, V., Horáček, J., Dolanská, M. and Matějčková, Š.  
Influence of different occupations with possible mutagenic effects on reproduction and level of induced chromosomal aberrations in peripheral blood (278) 19
- Kucheria, K., see Taneja, N. (283) 233
- Kulíková, L., see Rubeš, J. (283) 199
- Kulkarni, A.P., see Kitchin, K.T. (266) 253
- Kumar, N., see Bamezai, R. (283) 229
- Kumar Debnath, A., Lopez de Compadre, R.L. and Hansch, C.  
Mutagenicity of quinolines in *Salmonella typhimurium* TA100. A QSAR study based on hydrophobicity and molecular orbital determinants (280) 55
- Kumaroo, V., see Witt, K.L. (283) 59
- Kunz, B.A., see Armstrong, J.D. (268) 83
- Kunz, B.A., see Armstrong, J.D. (274) 123
- Kuo, M.-L., Lee, K.-C. and Lin, J.-K.  
Genotoxicities of nitropyrenes and their modulation by apigenin, tannic acid, ellagic acid and indole-3-carbinol in the Salmonella and CHO systems (270) 87
- Kuo, S., Shankel, D.M., Telikeyalli, H. and Mitscher, L.A.  
*Glycyrrhiza glabra* extract as an effector of interception in *Escherichia coli* K12 + (282) 93
- Kuo, S., see Mitscher, L.A. (267) 229
- Kuramochi, M., Seki, H., Tazawa, T., Sakai, S. and Sakai, Y.  
The micronucleus test with mouse peripheral blood on *N*-methyl-*N'*-nitro-*N*-nitrosoguanidine and mitomycin C (278) 121
- Kurishita, A., Ono, T., Okada, S., Mori, Y. and Sawada, S.  
Induction of external abnormalities in offspring of male mice irradiated with  $^{252}\text{Cf}$  neutron (268) 323
- Kurita, A., see Iwamoto, Y. (280) 233
- Kurita, M., see Suzuki, T. (278) 169
- Kuroda, Y., Jain, A.K., Tezuka, H. and Kada, T.  
Antimutagenicity in cultured mammalian cells (267) 201
- Kuroda, Y., see Kojima, H. (266) 171
- Kuroda, Y., see Kojima, H. (266) 85
- Kuroda, Y., see Tamai, K. (268) 231
- Kuroda, Y., see Yokoiyama, A. (268) 247
- Kurokawa, Y., see Sai, K. (269) 113
- Kusewitt, D.F., Budge, C.L., Nolla, H.A., Edwards, B.S. and Ley, R.D.  
Cell cycle progression in *denV*-transfected murine fibroblasts exposed to ultraviolet radiation (274) 163
- Kushiro, J.-i., Hirai, Y., Kusunoki, Y., Kyoizumi, S., Kodama, Y., Wakisaka, A., Jeffreys, A., Cologne, J.B., Dohi, K., Nakamura, N. and Akiyama, M.  
Development of a flow-cytometric HLA-A locus mutation assay for human peripheral blood lymphocytes (272) 17
- Kusumoto, M., see Watanabe, T. (281) 247
- Kusunoki, Y., see Kushiro, J.-i. (272) 17

- Kusunoki, Y., see Kyoizumi, S. (265) 173
- Kutlaca, A., see Grist, S.A. (266) 189
- Kuwahara, T., see Awogi, T. (278) 181
- Kuwano, A., Matsuura, S. and Kajii, T.  
Telomere association of human chromosomes induced by aphidicolin (269) 107
- Kuwayama, K., see Suzuki, J. (271) 89
- Kuykendall, J.R. and Bogdanffy, M.S.  
Efficiency of DNA-histone crosslinking induced by saturated and unsaturated aldehydes in vitro (283) 131
- Kuzmicky, P.A., see Kado, N.Y. (271) 253
- Kwanyuen, P., see Kligerman, A.D. (280) 35
- Kyoizumi, S., Umeki, S., Akiyama, M., Hirai, Y., Kusunoki, Y., Nakamura, N., Endoh, K., Konishi, J., Sasaki, M.S., Mori, T., Fujita, S. and Cologne, J.B.  
Frequency of mutant T lymphocytes defective in the expression of the T-cell antigen receptor gene among radiation-exposed people (265) 173
- Kyoizumi, S., see Kushiro, J.-i. (272) 17
- Laatikainen, R., see Tuppurainen, K. (266) 181
- Ladevèze, V., see Proust, J. (268) 265
- Lafleur, M.V.M., see Lutgerink, J.T. (275) 377
- Lagersted, A., see Nielsen, P.A. (278) 215
- Laib, R., see Cornet, M. (271) 213
- Laires, A., see Rueff, J. (265) 75
- Laires, A., see Rueff, J. (269) 243
- Lake, B.G., see Alldrick, A.J. (268) 307
- Lambert, B., see Andersson, B. (269) 129
- Lambert, M.W., Tsongalis, G.J., Lambert, W.C., Hang, B. and Parrish, D.D.  
Defective DNA endonuclease activities in Fanconi's anemia cells, complementation groups A and B (273) 57
- Lambert, M.W., see Lambert, W.C. (273) 179
- Lambert, M.W., see Parrish, D.D. (273) 157
- Lambert, W.C. and Lambert, M.W.  
Co-recessive inheritance: A model for DNA repair and other surveillance genes in higher eukaryotes (273) 179
- Lambert, W.C., see Lambert, M.W. (273) 57
- Lambert, W.C., see Parrish, D.D. (273) 157
- Lamberti, L., see Bigatti, P. (282) 19
- Langård, S., see Jelmert, Ø. (271) 289
- Langebartels, C., see Gichner, T. (281) 203
- Langenbach, R., Blaise Smith, P. and Crespi, C.  
Recombinant DNA approaches for the development of metabolic systems used in in vitro toxicology (277) 251
- Lapidot-Lifson, Y., see Zakut, H. (276) 275
- Larripa, I.B., see Carballo, M. (279) 245
- Larsen, J.C., see Nielsen, P.A. (278) 215
- Lau, B.H.S., see Wong, B.Y.Y. (279) 209
- Laval, J., see Felzenszwalb, I. (273) 263
- Lavappa, K.S., see Sheu, C.W. (280) 181
- Lavi, S., see Aladjem, M.I. (276) 339
- Lawlor, T., see Smith, C. (279) 61
- Lawrence, B.K., see DeMarini, D.M. (267) 1
- Lawson, T. and Kolar, C.  
Mutation of V79 cells by *N*-dialkylnitrosamines after activation by hamster pancreas duct cells (272) 139
- Lazutka, J.R. and Rudaitienė, S.  
Modulation by novobiocin of sister-chromatid exchanges induced by tumor necrosis factor in human lymphocytes (268) 217
- Lecona, S.U., see Ruiz, E.F. (270) 45
- Le Curieux, F., Marzin, D. and Erb, F.  
Genotoxic activity of three carcinogens in peripheral blood erythrocytes of the newt *Pleurodeles waltl* (283) 157
- Lee, H.G., see Grant, W.F. (270) 53
- Lee, J.-S., see Park, E.-H. (268) 239
- Lee, J.-Y., see Park, E.-H. (268) 239
- Lee, J.K., see Sheu, C.W. (280) 181
- Lee, K.-C., see Kuo, M.-L. (270) 87
- Lee, M.-S., see Tamura, N. (283) 97
- Lee, S.-F., see Lin, J.-K. (269) 217
- Legator, M.S., see Hoyos, L.S. (280) 29
- Legator, M.S., see Ward Jr., J.B. (268) 49
- Lehmann, A.R., Hoeijmakers, J.H.J., Van Zeeland, A.A., Backendorf, C.M.P., Bridges, B.A., Collins, A., Fuchs, R.P.D., Margison, G.P., Montesano, R., Moustacchi, E., Natarajan, A.T., Radman, M., Sarasin, A., Seeberg, E., Smith, C.A., Stefanini, M., Thompson, L.H., Van der Schans, G.P., Weber, C.A. and Zdzienicka, M.Z.  
Workshop on DNA repair (273) 1
- Lehmann, M., see De Andrade, H.H.R. (279) 281
- Lenka, M., see Panda, K.K. (280) 149
- León-Cázares, J.M., see Herrera, L.A. (270) 211
- Leonard, J.C., see Wise, J.P. (278) 69
- Leonard, R.C., see Bender, M.A. (281) 227
- Leonard, R.C., see Bender, M.A. (283) 87
- Lerda, D. and Rizzi, R.  
Cytogenetic study of persons occupationally exposed to ethylene oxide (281) 31
- Lerda, D.  
The effect of lead on *Allium cepa* L. (281) 89
- Leroux, B., see Claxton, L.D. (276) 23
- Leroux, B.G., see Krewski, D. (276) 33
- Leroux, J.-P., see Carrière, V. (268) 11
- Lesam, M., see Cherry, L.M. (275) 57
- Lesca, P., see Peryt, B. (269) 201
- Lesser, J.M., see Cherry, L.M. (275) 57
- Levan, G., Ståhl, F. and Wettergren, Y.  
Gene amplification in the murine SEWA system (276) 285
- Levine, A.S., see Carty, M.P. (274) 29
- Levis, A.G., see Paleologo, M. (281) 11
- Levis, A.G., see Russo, A. (281) 187
- Lewan, L., see Morales, P. (268) 315
- Lewis, S.E., see Barnett, L.B. (282) 127
- Lewtas, J., Claxton, L.D., Rosenkranz, H.S., Schuetzle, D., Shelby, M., Matsushita, H., Würzler, F.E., Zimmermann, F.K., Löfroth, G., May, W.E., Krewski, D., Matsushima, T., Ohnishi, Y., Gopalan, H.N.G., Sarin, R. and Becking, G.C.  
Design and implementation of a collaborative study of the mutagenicity of complex mixtures in *Salmonella typhimurium* (276) 3
- Lewtas, J., see Claxton, L.D. (276) 61
- Lewtas, J., see May, W.E. (276) 11
- Ley, R.D., see Kusewitt, D.F. (274) 163



- Lezza, A.M.S., see Gadaleta, M.N. (275) 181
- Li, D. and Randerath, K.  
Modulation of DNA modification (I-compound) levels in rat liver and kidney by dietary carbohydrate, protein, fat, vitamin, and mineral content (275) 47
- Li, J.C., see Kaminskas, E. (274) 103
- Li, Y., see Dunipace, A.J. (279) 255
- Lialiaris, T., Pantazaki, A., Sivridis, E. and Mourelatos, D.  
Chlorpromazine-induced damage on nucleic acids: a combined cytogenetic and biochemical study (265) 155
- Liang, Y., see Ruan, C.-c. (279) 35
- Liber, H.L., see Amundson, S.A. (267) 89
- Lin, G., see Ma, T.-H. (270) 39
- Lin, J.-K. and Lee, S.-F.  
Enhancement of the mutagenicity of polyphenols by chlorination and nitrosation in *Salmonella typhimurium* (269) 217
- Lin, J.-K. and Tseng, S.-F.  
Chromosomal aberrations and sister-chromatid exchanges induced by *N*-nitroso-2-acetylaminofluorene and their modifications by arsenite and selenite in Chinese hamster ovary cells (265) 203
- Lin, J.-K., Cheng, J.-T. and Lin-Shiau, S.-Y.  
Enhancement of the mutagenicity of IQ and MeIQ by nitrite in the *Salmonella* system (278) 277
- Lin, J.-K., see Kuo, M.-L. (270) 87
- Lin-Shiau, S.-Y., see Lin, J.-K. (278) 277
- Lin, X., see Sugiyama, M. (283) 211
- Ling, S., see Gómez-Arroyo, S. (281) 173
- Linn, S., see Keeney, S. (273) 49
- Linnainmaa, K., see Nylund, L. (265) 223
- Linnane, A.W., Zhang, C., Baumer, A. and Nagley, P.  
Mitochondrial DNA mutation and the ageing process: bioenergy and pharmacological intervention (275) 195
- Little, J.B., see Chang, W.P. (270) 191
- Little, J.B., see Troilo, P. (283) 237
- Liu, J.-l., see Ruan, C.-c. (279) 35
- Liu, Z.-h., see Ruan, C.-c. (279) 35
- Livneh, Z., see Skaliter, R. (267) 139
- Llagostera, M., see Clerch, B. (281) 207
- Lloyd, D.C., see Al-Sabti, K. (280) 215
- Lockhart, A.-M.C., Piegorsch, W.W. and Bishop, J.B.  
Assessing overdispersion and dose-response in the male dominant lethal assay (272) 35
- Loeb, L.A., see Subba Rao, K. (275) 317
- Loechler, E.L., see Rodriguez, H. (270) 219
- Löfroth, G., see Lewtas, J. (276) 3
- Logan, D.M., see Grant, W.F. (270) 53
- Lohman, P.H.M., Mendelsohn, M.L., Moore II, D.H., Waters, M.D., Brusick, D.J., Ashby, J. and Lohman, W.J.A.  
A method for comparing and combining short-term genotoxicity test data: The basic system (266) 7
- Lohman, P.H.M., see Brusick, D.J. (266) 1
- Lohman, P.H.M., see De Cock, J.G.R. (274) 85
- Lohman, P.H.M., see Mendelsohn, M.L. (266) 43
- Lohman, P.H.M., see Moore II, D.H. (266) 27
- Lohman, P.H.M., see Van Loon, A.A.W.M. (274) 19
- Lohman, P.H.M., see Zdzienicka, M.Z. (273) 73
- Lohman, W.J.A., see Lohman, P.H.M. (266) 7
- Lohrer, H., see Robson, T. (274) 177
- Lopez-de-Cerain, A., see García, E. (268) 1
- Lopez de Compadre, R.L., see Kumar Debnath, A. (280) 55
- Loprieno, N., see Barale, R. (271) 223
- Loprieno, N., see Barrai, I. (267) 173
- Lošan, F., see Senft, V. (279) 171
- Lötjönen, S., see Tuppurainen, K. (266) 181
- Lott, M.T., see Corral-Debrinski, M. (275) 169
- Lovell, D.P., see Barnett, L.B. (282) 127
- Lovell, D.P., see Davies, M.J. (265) 165
- Lowe, J.E., see Green, M.H.L. (273) 137
- Lundgren, K., see Knudsen, L.E. (279) 129
- Lundsteen, C., see Knudsen, L.E. (279) 129
- Lutgerink, J.T., Van den Akker, E., Smeets, I., Pachén, D., Van Dijk, P., Aubry, J.-M., Joenje, H., Lafleur, M.V.M. and Retèl, J.  
Interaction of singlet oxygen with DNA and biological consequences (275) 377
- Luzzi, L., see Brandi, G. (281) 157
- Lytcheva, T.A., see Fuchs, S.Y. (268) 155
- Lyubimova, K.A. and Chepurinov, A.I.  
On spontaneous mutagenesis and cell cultivation conditions (266) 135
- Ma, G.-J., see Xue, K.-X. (278) 259
- Ma, T.-H., Sandhu, S.S., Peng, Y., Chen, T.D. and Kim, T.-w.  
Synergistic and antagonistic effects on genotoxicity of chemicals commonly found in hazardous waste sites (270) 71
- Ma, T.-H., Xu, J., Xia, W., Jong, X., Sun, W. and Lin, G.  
Proficiency of the Tradescantia-micronucleus image analysis system for scoring micronucleus frequencies and data analysis (270) 39
- Ma, T.-H., see Knasmüller, S. (270) 31
- Ma, T.-H., see Ruiz, E.F. (270) 45
- Machida, H., see Suzutani, T. (267) 125
- Mackay, J.M. and Elliott, B.M.  
Dose-ranging and dose-setting for in vivo genetic toxicology studies (271) 97
- Maddalena, A., see Di Leonardo, A. (269) 319
- Madriral-Bujaidar, E., see Morales-Ramírez, P. (279) 269
- Madriral-Bujaidar, E., see Tapia P., F. (281) 283
- Madzak, C., Cabral-Neto, J.B., Menck, C.F.M. and Sarasin, A.  
Spontaneous and ultraviolet-induced mutations on a single-stranded shuttle vector transfected into monkey cells (274) 135
- Maekawa, K., see Ohtsuka, M. (283) 83
- Maekawa, M., see Katoh, Y. (279) 239
- Magdi, M., see Saffran, W.A. (274) 1
- Magnusson, J., see Ramel, C. (267) 221
- Maheshwari, M.C., see Taneja, N. (283) 233
- Mahmood, R. and Vasudev, V.  
Inducible protective processes in animal systems. III. Adaptive response of meiotic cells of the grasshopper,



- Poecilocerus pictus*, to a low dose of ethyl methanesulfonate (283) 243
- Maier, P., see Würzler, F.E. (283) 107
- Maiese, W.M., see Osburne, M.S. (274) 79
- Majone, F., see Russo, A. (269) 119
- Mäkelä, T.P., Saksela, K. and Alitalo, K.  
Amplification and rearrangement of *L-myc* in human small-cell lung cancer (276) 307
- Mäki-Paakkanen, J., see Von Wright, A. (269) 27
- Makita, T., see Kasahara, Y. (278) 145
- Makita, T., see Kasahara, Y. (280) 117
- Malaveille, C., see Chen, C.S. (265) 211
- Malini, R.P., see Meshram, G.P. (279) 275
- Malone, R.E., see Montelone, B.A. (267) 55
- Malone, W.F., see Kelloff, G.J. (267) 291
- Manor, A., see Shiloh, Y. (276) 329
- Manzato, A.J., see Silva, A.E. (282) 213
- Marafante, E., see Sorsa, M. (271) 261
- Marchetti, F., Tiveron, C., Bassani, B. and Pacchierotti, F.  
Griseofulvin-induced aneuploidy and meiotic delay in female mouse germ cells. II. Cytogenetic analysis of one-cell zygotes (266) 151
- Marchetti, F., see Tiveron, C. (266) 143
- Marcos, R., see Ribas, G. (278) 43
- Marcos, R., see Sorsa, M. (271) 261
- Marcos, R., see Torres, C. (280) 291
- Margison, G.P., see Angelis, K. (273) 271
- Margison, G.P., see Kleibl, K. (282) 39
- Margison, G.P., see Lehmann, A.R. (273) 1
- Margolin, B.H., see Murphy, S.A. (271) 39
- Margulies, L., see Balter, H. (267) 31
- Mariani, L., see Pardini, C. (275) 1
- Mariani, L., see Pardini, C. (283) 125
- Mariani, T., see Rainaldi, G. (266) 273
- Marinoni, S., see Stefanini, M. (273) 119
- Marquardt, H., see Blömeke, B. (265) 263
- Marrot, L. and Giacomoni, P.U.  
Enhancement of oxidative DNA degradation by histidine: the role of stereochemical parameters (275) 69
- Marsboom, R., see Vanparys, P. (282) 191
- Marshall, R.R., see Kirkland, D.J. (279) 181
- Martelli, A., see Brambilla, G. (272) 9
- Martelli, P., see Riccio, M.L. (279) 103
- Martin, E.A. and Waters, R.  
Sensitivity and single-strand DNA break repair in Chinese hamster mutants exposed to the carcinogen aflatoxin B<sub>1</sub> epoxide and its dichloride model (273) 243
- Martin, E.A., see Waters, R. (273) 145
- Martinez-Berganza, A., see Sinues, B. (280) 271
- Martinez-Merino, V., see García, E. (268) 1
- Marzin, D., see Le Curieux, F. (283) 157
- Marzin, D.R., see Krivobok, S. (279) 1
- Mašek, F. and Sedláková, M.  
Inducible stable DNA replication in *Escherichia coli uvr<sup>+</sup>* and *uvr<sup>-</sup>* cells, treated with genotoxic chemicals (281) 63
- Mašek, F., see Kleibl, K. (282) 39
- Masker, W., see Pierce, J.C. (281) 81
- Massoud, A., see Anwar, W. (272) 83
- Masuda, T., see Akuzawa, S. (266) 63
- Masumbuko, M.B., Freund, M.M. and De Meyer, R.  
Synaptonemal complex alterations in X-irradiated and in oestrogen-treated mice: a comparative study (282) 3
- Matějčková, Š., see Kučerová, M. (278) 19
- Mateos, J.C., see Cortés, F. (266) 99
- Mateos, J.C., see Mateos, S. (266) 215
- Mateos, S., Panneerselvam, N., Mateos, J.C. and Cortés, F.  
A comparative study of the potentiating effect of caffeine and poly-D-lysine on chromosome damage induced by X-rays in plant cells (266) 215
- Mateos, S., see Cortés, F. (266) 99
- Mateos, S., see Daza, P. (270) 177
- Mathew, G., Vijayalaxmi, K.K. and Abdul Rahiman, M.  
Methyl parathion-induced sperm shape abnormalities in mouse (280) 169
- Matsumoto, A., see Iwakura, K. (278) 131
- Matsumoto, H., see Matsushita, H. (271) 1
- Matsumoto, K., Yashiki, T., Bessho, T., Negishi, K. and Hayatsu, H.  
Analysis of phage M13mp2 mutants produced from transfection of phage DNA having *N*<sup>4</sup>-aminocytosines at defined sequence positions (268) 59
- Matsumoto, T., see Iwakura, K. (278) 131
- Matsumura, H., see Romagna, F. (278) 197
- Matsumura, H., see Sasaki, Y.F. (269) 79
- Matsuoka, A., Yamazaki, N., Suzuki, T., Hayashi, M. and Sofuni, T.  
Evaluation of the micronucleus test using a Chinese hamster cell line as an alternative to the conventional in vitro chromosomal aberration test (272) 223
- Matsuoka, A., see Asita, A.O. (271) 29
- Matsuoka, A., see Suzuki, T. (278) 169
- Matsuoka, H., see Arimoto, S. (282) 177
- Matsushima, T., see Brusick, D.J. (266) 1
- Matsushima, T., see Lewtas, J. (276) 3
- Matsushima, T., see Tepsuwan, A. (281) 55
- Matsushita, H., Endo, O., Goto, S., Shimizu, H., Matsumoto, H., Tamakawa, K., Endo, T., Sakabe, Y., Tokiwa, H. and Ando, M.  
Collaborative study using the preincubation *Salmonella typhimurium* mutation assay for airborne particulate matter in Japan. A trial to minimize interlaboratory variation (271) 1
- Matsushita, H., see Claxton, L.D. (276) 61
- Matsushita, H., see Goto, S. (276) 93
- Matsushita, H., see Lewtas, J. (276) 3
- Matsuura, S., see Kuwano, A. (269) 107
- Matsuura, Y., see Shimada, H. (278) 165
- Matter, B.E., see Brusick, D.J. (266) 1
- Matula, T.I., see Rogers, C.G. (280) 17
- May, W.E., Benner Jr., B.A., Wise, S.A., Schuetzle, D. and Lewtas, J.  
Standard reference materials for chemical and biological studies of complex environmental samples (276) 11
- May, W.E., see Lewtas, J. (276) 3
- Mayer, V.W., Goin, C.J., Arras, C.A. and Taylor-Mayer, R.E.  
Comparison of chemically induced chromosome loss in a diploid, triploid, and tetraploid strain of *Saccharomyces cerevisiae* (279) 41

- Mazar Barnett, B.  
Effect of low temperature on radiation-induced genetic damage in *Drosophila melanogaster*: response of motile sperm and late spermatids (268) 183
- McCarron, M., see Grist, S.A. (266) 189
- McCullough, J.J., see Willems, M.I. (278) 227
- McDiarmid, M.A., Kolodner, K., Humphrey, F., Putman, D. and Jacobson-Kram, D.  
Baseline and phosphoramidate mustard-induced sister-chromatid exchanges in pharmacists handling anti-cancer drugs (279) 199
- McFee, A.F., Tice, R.R. and Shelby, M.D.  
In vivo cytogenetic activity of diphenylhydantoin in mice (278) 61
- McFee, A.F., see Witt, K.L. (283) 59
- McIntyre, P., see Perry, M.E. (276) 189
- McKay, M. and Hanawalt, P.  
Workshop on DNA-repair genes. Held at the 9th International Congress of Radiation Research, Toronto, Canada, 7-12 July 1991 (274) 157
- Megumi, T., Gamo, S. and Tsujii, Y.  
Protective effects of ether, oxygen and their mixture for radiation in *Drosophila melanogaster* (274) 73
- Meisner, L., see Roloff, B. (281) 295
- Meisner, L.F., Roloff, B., Sargent, L. and Pitot, H.  
Interactive cytogenetic effects on rat bone-marrow due to chronic ingestion of 2,5,2',5' and 3,4,3',4' PCBs (283) 179
- Melcion, C., see Benning, V. (280) 137
- Menck, C.F.M., see Madzak, C. (274) 135
- Menck, C.F.M., see Sies, H. (275) 367
- Menck, C.F.M., see Sary, A. (272) 101
- Mendelsohn, M.L., Moore II, D.H. and Lohman, P.H.M.  
A method for comparing and combining short-term genotoxicity test data: Results and interpretation (266) 43
- Mendelsohn, M.L.  
Antimutagenic effects in humans (267) 257
- Mendelsohn, M.L., see Brusick, D.J. (266) 1
- Mendelsohn, M.L., see Lohman, P.H.M. (266) 7
- Mendelsohn, M.L., see Moore II, D.H. (266) 27
- Meneghini, R. and Da C. Leitão, A.A.  
Roberto Alcantara Gomes (1941-1991) (266) 61
- Menon, V.V., see Rachel, A.J. (283) 193
- Menz, W., see Speit, G. (283) 75
- Mercader-Martínez, J., see Morales-Ramírez, P. (279) 269
- Mersch-Sundermann, V., Klopman, G. and Rosenkranz, H.S.  
Structural requirements for the induction of the SOS repair in bacteria by nitrated polycyclic aromatic hydrocarbons and related chemicals (265) 61
- Mersch-Sundermann, V., Mochayed, S. and Kevekordes, S.  
Genotoxicity of polycyclic aromatic hydrocarbons in *Escherichia coli* PQ37 (278) 1
- Meshram, G.P., Malini, R.P. and Rao, K.M.  
Mutagenicity of *N,N'*-dimethylurea and methylamine hydrochloride in the Ames Salmonella/microsome test: absence of mutagenic response (279) 275
- Mester, E., see Czeizel, A. (270) 103
- Miadoková, E., Vlčková, V., Dúhová, V., Trebatická, M., Garajová, L., Grolmus, J., Podstavková, S. and Vlček, D.  
Effects of supercypermethrin, a synthetic developmental pyrethroid, on four biological test systems (280) 161
- Michaelis, A., see Rieger, R. (282) 69
- Michalska, J., see Motykiewicz, G. (280) 253
- Micheletti, R., see Barrai, I. (267) 173
- Migliaccio, G., see Pontecorvo, G. (266) 93
- Miglietta, L.M., see Foiles, P.G. (279) 91
- Milella, F., see Gadaleta, M.N. (275) 181
- Milković-Kraus, S., see Kubelka, D. (283) 169
- Miller, D.W., see Yu, S. (283) 45
- Mimaki, T., see Satokata, I. (273) 193
- Min, S., Helissey, P., Callais, F., Giorgi-Renault, S. and Festy, B.  
Structure-mutagenicity relationships in a series of indolo[3,2-*c*]quinoline-1,4-diones that have shown cytotoxic properties on leukemia cells (280) 225
- Minnucci, S., see Galli, A. (282) 55
- Minnunni, M., Wolleb, U., Mueller, O., Pfeifer, A. and Aeschbacher, H.U.  
Natural antioxidants as inhibitors of oxygen species induced mutagenicity (269) 193
- Miquel, J.  
An update on the mitochondrial-DNA mutation hypothesis of cell aging (275) 209
- Mircheva, T.J., see Blagoeva, P.M. (268) 77
- Mircheva, Z., see Balansky, R. (281) 99
- Mirskaya, E.E., see Rusina, O.Y. (283) 161
- Mirzayans, F., Parry, J.M. and Mirzayans, R.  
Application of the standard mutagenesis assay results in underestimation of ethyl methanesulphonate-induced mutations to ouabain-resistance in Chinese hamster cells (282) 31
- Mirzayans, R., Aubin, R.A. and Paterson, M.C.  
Differential expression and stability of foreign genes introduced into human fibroblasts by nuclear versus cytoplasmic microinjection (281) 115
- Mirzayans, R., see Mirzayans, F. (282) 31
- Mitchell, D.L., see Zdzienicka, M.Z. (273) 73
- Mitra, S., see Wang, Y. (273) 221
- Mitscher, L.A., Telikepalli, H., Wang, P.B.-B., Kuo, S., Shankel, D.M. and Stewart, G.  
Antimutagenicity of secondary metabolites from higher plants (267) 229
- Mitscher, L.A., see Kuo, S. (282) 93
- Miura, D., see Kasahara, Y. (278) 145
- Miura, D., see Kasahara, Y. (280) 117
- Miura, N., see Eker, A.P.M. (274) 211
- Miura, N., see Satokata, I. (273) 193
- Miwa, Y., see Ohuchida, A. (278) 139
- Mixich, F., see Raicu, P. (283) 215
- Miyahana, K., see Kondo, Y. (278) 187
- Miyamae, Y., see Sugiyama, C. (278) 117
- Miyamoto, T.  
An enhancement of the yield of X-ray-induced *Minute* mutations in the *c3G* female-*ywmf-2* male system of *Drosophila melanogaster* (283) 271
- Miyata, N., see Sera, N. (280) 81
- Mizuno, K., see Hamada, K. (267) 97
- Moan, E., see Schwartz, J.L. (282) 13
- Mochayed, S., see Mersch-Sundermann, V. (278) 1
- Moens, W., see Castelain, P. (280) 9
- Mohn, G., see Claxton, L.D. (276) 23



- Mohn, G.R., see Jansen, J.G. (266) 105
- Mohn, G.R., see Vertegaal, L.B.J. (281) 93
- Mohr, A., see Zimmermann, F.K. (270) 151
- Monaco, M., Dominici, R., Barisano, P., Di Palermo, G., Galli, A. and Bronzetti, G.  
Mutagenicity of methyl methanesulfonate and cyclophosphamide in resting and growing *Saccharomyces cerevisiae* D7 cells (282) 235
- Mondon, P. and Shahin, M.M.  
Protective effect of two sunscreens against lethal and genotoxic effects of UVB in V79 Chinese hamster cells and *Saccharomyces cerevisiae* strains XV185-14C and D5 (279) 121
- Monge, A., see García, E. (268) 1
- Monteith, D.K.  
Inhibition of sulfotransferase affecting unscheduled DNA synthesis induced by 2-acetylaminofluorene: An in vivo and in vitro comparison (282) 253
- Monteith, D.K., see Ciaravino, V. (280) 205
- Montelone, B.A., Gilbertson, L.A., Nassar, R., Giroux, C. and Malone, R.E.  
Analysis of the spectrum of mutations induced by the rad3-102 mutator allele of yeast (267) 55
- Montero, R., see Gonsebatt, M.E. (283) 91
- Montero, R., see Herrera, L.A. (270) 211
- Montero, R., see Rojas, E. (282) 283
- Montesano, R., see Lehmann, A.R. (273) 1
- Montreuil, C.N., Ball, J.C., Gorse Jr., R.A. and Young, W.C.  
Solvent extraction efficiencies of mutagenic components from diesel particles (282) 89
- Moore, M.M., see Fuscoe, J.C. (283) 13
- Moore, M.M., see Fuscoe, J.C. (283) 255
- Moore, M.M., see Hozier, J. (270) 201
- Moore II, D.H., Mendelsohn, M.L. and Lohman, P.H.M.  
A method for comparing and combining short-term genotoxicity test data: The optimal use of dose information (266) 27
- Moore II, D.H., see Brusick, D.J. (266) 1
- Moore II, D.H., see Hatch, F.T. (271) 269
- Moore II, D.H., see Lohman, P.H.M. (266) 7
- Moore II, D.H., see Mendelsohn, M.L. (266) 43
- Mor, O., see Shiloh, Y. (276) 329
- Morales, P., Andersson, M., Lewan, L. and Sterner, O.  
Structure-activity relationships for unsaturated dialdehydes. 6. The mutagenic activity of 11 compounds in the V79/HGPRT assay (268) 315
- Morales, P.R., see Rodriguez-Arnaiz, R. (180) 75
- Morales-Ramírez, P., Madrigal-Bujaidar, E., Mercader-Martínez, J., Cassani, M., González, G., Chamorro-Cevallos, G. and Salazar-Jacobo, M.  
Sister-chromatid exchange induction produced by in vivo and in vitro exposure to alpha-asarone (279) 269
- Morales-Ramírez, P., Rodríguez-Reyes, R. and Vallarino-Kelly, T.  
In vivo fate of MMS-induced DNA lesions that elicit SCE (272) 215
- Morgan, D.L., see Kligerman, A.D. (280) 35
- Mori, M., see Sugiyama, C. (278) 117
- Mori, N., see Shimoi, K. (266) 205
- Mori, T., see Kyoizumi, S. (265) 173
- Mori, Y., see Kurishita, A. (268) 323
- Morita, T., Nagaki, T., Fukuda, I. and Okumura, K.  
Clastogenicity of low pH to various cultured mammalian cells (268) 297
- Morita, T., see Awogi, T. (278) 181
- Morita, T., see Kojima, M. (274) 65
- Morita, T., see Sato, S.-i. (278) 103
- Morley, A.A., see Grist, S.A. (266) 189
- Morris, D.L., see Hoyos, L.S. (280) 29
- Morris, D.L., see Ward Jr., J.B. (268) 49
- Morris, J.M., see Travis, C.C. (279) 261
- Morris, T., see Aghamohammadi, S.Z. (269) 1
- Mosa, H.S., see Balasem, A.N. (271) 209
- Mothersill, C., see Seymour, C. (267) 19
- Motykievicz, G., Michalska, J., Pendzich, J., Perera, F.P. and Choraży, M.  
A cytogenetic study of men environmentally and occupationally exposed to airborne pollutants (280) 253
- Mouratidou, M., see Kourakis, A. (279) 145
- Mourelatos, D., see Kourakis, A. (279) 145
- Mourelatos, D., see Lialiaris, T. (265) 155
- Mourelatos, D., see Petridou, M. (280) 143
- Mouret, J.-F., see Cadet, J. (275) 343
- Moustacchi, E., see Lehmann, A.R. (273) 1
- Mower, H.F., see Arroyo, P.L. (281) 193
- Mudry, M.D., see Carballo, M. (279) 245
- Mueller, O., see Minnunni, M. (269) 193
- Mullenders, L.H.F., see Zdzienicka, M.Z. (273) 73
- Müller-Höcker, J., Schneiderbanger, K., Stefani, F.H. and Kadenbach, B.  
Progressive loss of cytochrome c oxidase in the human extraocular muscles in ageing - a cytochemical-immuno-histochemical study (275) 115
- Müller, L., Kasper, P. and Kaufmann, G.  
The clastogenic potential in vitro of pyrrolizidine alkaloids employing hepatocyte metabolism (282) 169
- Müller, W., see Jung, R. (278) 265
- Munday, R., see Ferguson, L.R. (268) 199
- Muñoz, E.R., see Rey, M. (268) 95
- Munro, N.B., see Uziel, M. (277) 35
- Murata, K., see Awogi, T. (278) 181
- Murphy, S.A., Tice, R.R., Smith, M.G. and Margolin, B.H.  
Contributions to the design and statistical analysis of in vivo SCE experiments (271) 39
- Musk, S.R.R., see Godfrey, D.B. (274) 225
- Mustafi, R., see Schwartz, J.L. (282) 13
- Nagaki, T., see Morita, T. (268) 297
- Nagao, M., see Kako, Y. (282) 119
- Nagase, H., see Hamasaki, T. (280) 195
- Nagase, H., see Sato, M. (265) 149
- Nagashima, K., see Okaichi, K. (282) 183
- Nagley, P., see Linnane, A.W. (275) 195
- Nagy, B., see Pavlica, M. (281) 277
- Nakagawa, S., see Hara, M. (278) 175
- Nakai, Y., see Kasahara, Y. (278) 145
- Nakai, Y., see Kasahara, Y. (280) 117
- Nakajima, E., see Hatakeyama, Y. (278) 193



- Nakajima, M., see Kondo, Y. (278) 187
- Nakamura, N., see Kushiro, J.-i. (272) 17
- Nakamura, N., see Kyoizumi, S. (265) 173
- Nakamura, T., see Higashikuni, N. (278) 159
- Nakamura, Y., see Shimoi, K. (266) 205
- Nakayama, H., Shiota, S. and Umez, K.  
UV endonuclease-mediated enhancement of UV survival in *Micrococcus luteus*: evidence revealed by deficiency in the Uvr homolog (273) 43
- Nakayama, T., Niimi, T., Osawa, T. and Kawakishi, S.  
The protective role of polyphenols in cytotoxicity of hydrogen peroxide (281) 77
- Narbonne, J.F., see Decoudu, S. (269) 269
- Nardo, T., see Stefanini, M. (273) 119
- Nardone, A., see Turchi, G. (271) 79
- Narita, M., see Satokata, I. (273) 193
- Näslund, M., Kolman, A. and Ehrenberg, L.  
Inhibition of recA induction by the radioprotector 2-mercaptoethylamine (282) 203
- Nassar, R., see Montelone, B.A. (267) 55
- Natarajan, A.T. and Sram, R.  
Selected Poster Abstracts of the 21st Annual Meeting of the European Environmental Mutagen Society, 25-31 August 1991, Prague (Czechoslovakia) (271) 115
- Natarajan, A.T., Vogel, E.W. and Van Zeeland, A.A.  
Letter to the Editor (272) 193
- Natarajan, A.T., see Darroudi, F. (272) 237
- Natarajan, A.T., see Lehmann, A.R. (273) 1
- Natarajan, A.T., see Sorsa, M. (271) 261
- Natarajan, A.T., see Van Dam, F.J. (271) 231
- Nath, B., see Gu, Z.-W. (279) 55
- Navarová, J., see Chorvatovičová, D. (282) 147
- Nazzaro, V., see Stefanini, M. (273) 119
- Negishi, K., see Matsumoto, K. (268) 59
- Nersessian, A.K., Zilfian, V.N. and Koumkoumdjian, V.A.  
Comparative investigation of cyclophosphamide action on bone marrow cells of the Armenian hamster and 4 other species of rodents (268) 211
- Nersessians, A.K.  
Activity of human carcinogens in the Salmonella and rodent bone marrow cytogenetic tests (281) 239
- Nesnow, S., see Brusick, D.J. (266) 1
- Neudecker, T.  
The genetic toxicology of cinnamaldehyde (277) 173
- Neuhäuser-Klaus, A., see Ehling, U.H. (283) 185
- Neville, S., see Ayrton, A.D. (265) 1
- Neville, S., see Fenech, M. (281) 3
- Nichols, W.W., see Troilo, P. (283) 237
- Nicklas, J.A., see Fuscoe, J.C. (283) 13
- Nicole, A., see Ceballos-Picot, I. (275) 281
- Nicolini, P., see Fiorani, M. (282) 25
- Nicoloff, H., see Kanaya, N. (281) 47
- Niedzwiecki, A., see Fleming, J.E. (275) 267
- Nielsen, P.A., Lagersted, A., Danielsen, S., Jensen, A.A., Hart, J. and Larsen, J.C.  
Mutagenic activity of nine *N,N*-disubstituted hydrazines in the Salmonella/mammalian microsome assay (278) 215
- Nielsen, P.A., see Claxton, L.D. (276) 23
- Niimi, T., see Nakayama, T. (281) 77
- Nikischin, W., Siebel-Sauer, A., Wunder, E. and Schroeder-Kurth, M.  
Cloning properties of T lymphocyte subpopulations after treatment with 8-methoxypsoralen and UVA irradiation (268) 43
- Nikolova, T., see Kanaya, N. (281) 47
- Nilsson, U., see Rannug, U. (282) 219
- Ning, H., see Kado, N.Y. (271) 253
- Nishida, A., see Wu, F.-y. (283) 65
- Nito, S., see Kondo, Y. (278) 187
- Noblitt, T., see Dunipace, A.J. (279) 255
- Nohmi, T., see Oda, Y. (272) 91
- Nohmi, T., see Yamada, M. (283) 29
- Nolla, H.A., see Kusewitt, D.F. (274) 163
- Noriega-Aldana, N., see Gómez-Arroyo, S. (281) 173
- Norppa, H. and Järventaus, H.  
Induction of sister-chromatid exchanges by 2-amino-fluorene in cultured human lymphocytes with and without erythrocytes (282) 135
- Norppa, H., see Sippi, P. (279) 75
- Norris, E.S. and Woodruff, R.C.  
Visible mutations induced by P-M hybrid dysgenesis in *Drosophila melanogaster* result predominantly from *P* element insertions (269) 63
- Norris, P.G., see Cole, J. (273) 171
- Nozu, K., see Okaichi, K. (282) 183
- Nukaya, H., see Kako, Y. (282) 119
- Nunes, M.H., see Santos-Mello, R. (280) 261
- Nüsse, M., see Viaggi, S. (265) 9
- Nuzzo, F., see Casati, A. (275) 7
- Nylund, L. and Einistö, P.  
Mutagenicity testing of protein-containing and biological samples using the Ames/Salmonella plate incorporation test and the fluctuation test (272) 205
- Nylund, L., Hakala, E. and Sorsa, M.  
Application of a semi-automated SOS chromotest for measuring genotoxicities of complex environmental mixtures containing polycyclic aromatic hydrocarbons (276) 125
- Nylund, L., Heikkilä, P., Hämeilä, M., Pyy, L., Linnainmaa, K. and Sorsa, M.  
Genotoxic effects and chemical compositions of four creosotes (265) 223
- Nylund, L., see Claxton, L.D. (276) 23
- Obaseiki-Ebor, E.E. and Smith, K.C.  
Properties of R-plasmid pEB017, which confers both enhanced UV-radiation resistance and mutability to wild-type, *recA* and *umuC* strains of *Escherichia coli* K12 (267) 67
- Obe, G., see Von der Hude, W. (278) 289
- Oberto, G., see Bigatti, P. (282) 19
- Ochi, T., see Oya, Y. (266) 281
- Oda, Y., Shimada, T., Watanabe, M., Ishidate Jr., M. and Nohmi, T.  
A sensitive *umu* test system for the detection of mutagenic nitroarenes in *Salmonella typhimurium* NM1011 having a high nitroreductase activity (272) 91
- Oda, Y., see Yamazaki, H. (272) 183

- Odin, F., see Cadet, J. (275) 343
- Ogawa, H., see Fukushima, S. (275) 41
- Ogura, S., see Iwakura, K. (278) 131
- Ohara, K., see Sugiyama, C. (278) 117
- Ohi, H., see Fukuta, H. (269) 97
- Ohmori, K., see Romagna, F. (278) 197
- Ohnishi, T., see Okaichi, K. (282) 183
- Ohnishi, Y., see Lewtas, J. (276) 3
- Ohta, T., see Sasaki, Y.F. (269) 79
- Ohtsuka, M. and Maekawa, K.  
A straight correlation between mutagenic activity and  $\beta$ -galactosidase activity induced by monofunctional alkylating agents (283) 83
- Ohtsuki, H., see Suzuki, T. (278) 169
- Ohuchida, A., Furukawa, A., Yoshida, J., Watanabe, M., Aruga, F., Miwa, Y., Shinkawa, K. and Kinase, N.  
Micronucleus assays on 5-fluorouracil and 6-mercaptopurine with mouse peripheral blood reticulocytes (278) 139
- Oikawa, A., see Yasui, A. (273) 231
- Oikawa, A., see Zhao, J.H. (282) 49
- Okada, S., see Kurishita, A. (268) 323
- Okada, Y., see Satokata, I. (273) 193
- Okada, Y., see Satokata, I. (273) 203
- Okaichi, K., Nagashima, K., Nozu, K. and Ohnishi, T.  
Mutagenic specificity in DNA base sequence by irradiation of health lamp light (UV-B) in *Escherichia coli* (282) 183
- Okumura, K., see Morita, T. (268) 297
- Oliveira, M.D.M., see Salvadori, D.M.F. (265) 237
- Olvera, O., see Zimmering, S. (281) 169
- O'Neill, J.P., see Fuscoe, J.C. (283) 13
- Önfelt, A., Söderpalm-Berndes, C. and Wiberg, K.  
Antagonists to cholinergic receptors increase the frequency of binuclear V79 Chinese hamster cells. A mechanism for induction of aneuploidy (281) 267
- Önfelt, A.  
Bombesin impairs spindle function in mitotic V79 Chinese hamster cells by a receptor-dependent mechanism (270) 97
- Ong, T., see Claxton, L.D. (276) 23
- Ong, T., see Whong, W.-Z. (283) 1
- Ong, T.-M., see Gu, Z.-W. (279) 55
- Ong, T.-m., see Gu, Z.-W. (279) 217
- Ono, T., see Kurishita, A. (268) 323
- Ortiz, R., see Betancourt, M. (283) 173
- Ortiz, T., see Cortés, F. (266) 99
- Osawa, T., see Nakayama, T. (281) 77
- Osburne, M.S., Zavodny, S.M., Greenstein, M. and Maiese, W.M.  
Phenotypes conferred by the *Bacillus subtilis* recM13 mutation and the din23 fusion (274) 79
- Ose, Y., see Sato, M. (265) 149
- Osipova, G.Y., see Anisimov, V.N. (275) 97
- Osmak, M. and Horvat, D.  
Chromosomal analysis of Chinese hamster V79 cells exposed to multiple  $\gamma$ -ray fractions: induction of adaptive response to mitomycin C (282) 259
- Osorio, A., see Gómez-Arroyo, S. (281) 173
- Ostrosky-Wegman, P., see Gonshebbatt, M.E. (283) 91
- Ostrosky-Wegman, P., see Herrera, L.A. (270) 211
- Ostrosky-Wegman, P., see Rojas, E. (282) 283
- Otson, R., see Savard, S. (276) 101
- Ottaggio, L., see Viaggi, S. (265) 9
- Overton, L.K., see De Serres, F.J. (267) 105
- Overton, L.K., see De Serres, F.J. (269) 149
- Oya, Y., Takenaka, A., Ochi, T. and Yamamoto, K.  
The biological activity of hydrogen peroxide. V. The crystal structure of a histidine-peroxide adduct and its biological activities (266) 281
- Ozawa, S., see Kondo, K. (278) 109
- Pacchierotti, F., see Marchetti, F. (266) 151
- Pacchierotti, F., see Tiveron, C. (266) 143
- Pachen, D., see Lutgerink, J.T. (275) 377
- Pagura, M., see Heddle, J.A. (272) 195
- Pal, A.K., Rahman, M.S. and Chatterjee, S.N.  
On the induction of *umu* gene expression in *Salmonella typhimurium* strain TA1535/pSK1002 by some nitrofurans (280) 67
- Paleologo, M., Van Schooten, F.J., Pavanello, S., Kriek, E., Zordan, M., Clonfero, E., Bezze, C. and Levis, A.G.  
Detection of benzo[a]pyrene-diol-epoxide-DNA adducts in white blood cells of psoriatic patients treated with coal tar (281) 11
- Palermo, A.M., see Rey, M. (268) 95
- Palitti, F., see Turchi, G. (271) 79
- Palombo, F., see Benigni, R. (267) 77
- Pan, S.F., see Schubert, J. (282) 107
- Panda, B.B., see Panda, K.K. (280) 149
- Panda, K.K., Lenka, M. and Panda, B.B.  
Monitoring and assessment of mercury pollution in the vicinity of a chloralkali plant. III. Concentration and genotoxicity of mercury in the industrial effluent and contaminated water of Rushikulya estuary, India (280) 149
- Panneerselvam, N., see Cortés, F. (266) 99
- Panneerselvam, N., see Mateos, S. (266) 215
- Pannell, K.H., see Arenaz, P. (280) 109
- Pantazaki, A., see Lialiaris, T. (265) 155
- Paolini, M., Biagi, G.L., Bauer, C. and Cantelli-Forti, G.  
On the nature of non-genotoxic carcinogens. A unified theory including NGCs, co-carcinogens and promoters (281) 245
- Papamichail, M., see Sarri, C. (270) 125
- Papanastasiou, M., see Sarri, C. (270) 125
- Papeš, D., see Pavlica, M. (281) 277
- Pardini, C., Mariani, L., Voliani, M., Rainaldi, G. and Citti, L.  
The ability of liver extracts from different-aged rats to repair 'mis-instructive' and 'non-instructive' lesions of DNA (275) 1
- Pardini, C., Piras, A., Voliani, M., Rainaldi, G., Mariani, L., Taverna, P., D'Incalci, M. and Citti, L.  
Chinese hamster ovary cells deficient or proficient in O<sup>6</sup>-alkylguanine-DNA alkyltransferase activity are equally sensitive to X-rays (283) 125
- Park, E.-H., Kim, Y.J., Byun, D.H., Lee, J.-Y. and Lee, J.-S.  
Baseline frequency of sister-chromatid exchanges in 142 persons of the general Korean population (268) 239
- Parker, R., see Dabholkar, M. (274) 45



- Parrish, D.D., Lambert, W.C. and Lambert, M.W.  
Xeroderma pigmentosum endonuclease complexes show reduced activity on and affinity for psoralen cross-linked nucleosomal DNA (273) 157
- Parrish, D.D., see Lambert, M.W. (273) 57
- Parry, E.M., see Sorsa, M. (271) 261
- Parry, J.M., see Mirzayans, F. (282) 31
- Pasquini, R., see Taningher, M. (282) 99
- Pasupathy, K. and Pradhan, D.S.  
Evidence for excision repair in promitochondrial DNA of anaerobic cells of *Saccharomyces cerevisiae* (273) 281
- Patel, U., Bhimani, R. and Frenkel, K.  
Mechanism of mutagenicity by 5-hydroperoxymethyl-2'-deoxyuridine, an intermediate product of ionizing radiation, in bacteria. HPMdU bacterial mutagenicity and oxidation of DNA bases (283) 145
- Paterson, M.C., see Mirzayans, R. (281) 115
- Patierno, S.R., see Wise, J.P. (278) 69
- Patierno, S.R., see Xu, J. (280) 129
- Patnaik, K.K. and Tripathy, N.K.  
Farm-grade chlorpyrifos (Durmet) is genotoxic in somatic and germ-line cells of *Drosophila* (279) 15
- Patnaik, K.K., see Tripathy, N.K. (278) 23
- Pavanello, S., see Paleologo, M. (281) 11
- Pavlica, M., Papeš, D., Franekić, J. and Nagy, B.  
Effects of benzyladenine on prokaryotic and eukaryotic cells (281) 277
- Payne, V., see Smith, C. (279) 61
- Pearson, A., see Ferguson, L.R. (266) 231
- Pearson, A., see Ferguson, L.R. (268) 199
- Pearson, A., see Iwamoto, Y. (268) 35
- Pechan, R., see Stopper, H. (283) 21
- Pedersen, B., see Knudsen, L.E. (279) 129
- Pederson, T.C., see Claxton, L.D. (276) 23
- Pelliccia, F. and Rocchi, A.  
The effect of caffeine on DAPI-inducible fragile sites (282) 43
- Pendzich, J., see Motykiewicz, G. (280) 253
- Peng, Y., see Ma, T.-H. (270) 71
- Pereira, C.A.B., see Salvadori, D.M.F. (265) 237
- Pereira, M.A., see Schulte, P.A. (278) 237
- Perera, F.P., see Motykiewicz, G. (280) 253
- Perez, A.B., see Ruiz, E.F. (270) 45
- Perry, M.E., Rolfe, M., McIntyre, P., Commane, M. and Stark, G.R.  
Induction of gene amplification by 5-aza-2'-deoxycytidine (276) 189
- Peryt, B., Szymczyk, T. and Lesca, P.  
Mechanism of antimutagenicity of wheat sprout extracts (269) 201
- Pesle, M.L., see Courtois, Y.A. (276) 133
- Peters, W.P., see Tice, R.R. (271) 101
- Peterson, L.A., see Foiles, P.G. (279) 91
- Petridou, M., Mourelatos, D., Tsolaki, M., Kazis, A., Kourakis, A. and Routsonis, K.  
Cytogenetic damage by melphalan and hyperthermia in patients with an initial epileptic attack (280) 143
- Pfeifer, A., see Minnunni, M. (269) 193
- Piegorsch, W.W., see Lockhart, A.-M.C. (272) 35
- Pierce, J.C. and Masker, W.  
Frameshift mutagenesis in bacteriophage T7 (281) 81
- Pieters, L., see Rubiolo, P. (281) 143
- Pignatelli, B., see Chen, C.S. (265) 211
- Pimentel, E., see Zimmering, S. (281) 169
- Pinto, B., see Rainaldi, G. (266) 273
- Piras, A., see Pardini, C. (283) 125
- Piras, A., see Rainaldi, G. (266) 273
- Pitot, H., see Meisner, L.F. (283) 179
- Podstavková, S., see Miadoková, E. (280) 161
- Pogai, H., see Ferguson, L.R. (265) 181
- Pogai, H.B., see Iwamoto, Y. (280) 233
- Poginsky, B., see Blömeke, B. (265) 263
- Polverelli, M., see Cadet, J. (275) 343
- Pontecorvo, G., Avitabile, A., Esposito, G., Migliaccio, G. and Carfagna, M.  
Induced crossing-over in *Drosophila melanogaster* germ cells of DNA repair-proficient and repair-deficient (*mei-9<sup>L1</sup>*) males following larval feeding with 5-azacytidine and mitomycin C (266) 93
- Poot, M., Epe, B. and Hoehn, H.  
Cell cycle effects of the DNA topoisomerase inhibitors camptothecin and m-AMSA in lymphoblastoid cell lines from patients with Fanconi anemia (270) 185
- Pradhan, D.S., see Pasupathy, K. (273) 281
- Preston, R.J., see Bender, M.A. (281) 227
- Preston, R.J., see Bender, M.A. (283) 87
- Priestly, B.G., see Simula, A.P. (271) 49
- Proroková, I., see Rubeš, J. (283) 199
- Proust, J., Prudhommeau, C., Ladevèze, V., Gotteland, M. and Fontyne-Branchard, M.C.  
I-R hybrid dysgenesis in *Drosophila melanogaster*. Use of in situ hybridization to show the association of I factor DNA with induced sex-linked recessive lethals (268) 265
- Prudhommeau, C., see Proust, J. (268) 265
- Psaraki, K., see Sorsa, M. (271) 261
- Putman, D., see McDiarmid, M.A. (279) 199
- Puyo, M.-F., Calsou, P. and Salles, B.  
UV resistance of *E. coli* K-12 deficient in cAMP/CRP regulation (282) 247
- Pyatt, B.E., see Bender, M.A. (281) 227
- Pyatt, B.E., see Bender, M.A. (283) 87
- Pyy, L., see Nylund, L. (265) 223
- Quillardet, P., see Claxton, L.D. (276) 23
- Raatikainen, O., see Von Wright, A. (269) 27
- Rabago, V.M.E., see Ruiz, E.F. (270) 45
- Rachel, A.J., Sharma, T. and Menon, V.V.  
Differences in sister-chromatid exchange frequency between homologous chromosomes in *Muntiacus muntjak* (283) 193
- Radcliff, G., see Sarkar, F.H. (282) 273
- Radman, M., see Lehmann, A.R. (273) 1
- Radul, J.A., see Ager, D.D. (283) 279
- Raglione, M., see De Marco, A. (279) 9
- Rahman, M.S., see Pal, A.K. (280) 67



- Raicu, P. and Mixich, F.  
Cytogenetic effects of sodium azide encapsulated in liposomes on heteroploid cell cultures (283) 215
- Rainaldi, G., Pinto, B., Mariani, T., Vatteroni, L. and Piras, A.  
Responsiveness of tumorigenic and non-tumorigenic CHEF18 Chinese hamster cells to 1- $\beta$ -D-arabinofuranosylcytosine treatment (266) 273
- Rainaldi, G., see Gadaleta, M.N. (275) 181
- Rainaldi, G., see Pardini, C. (275) 1
- Rainaldi, G., see Pardini, C. (283) 125
- Rainbow, A.J. and Castillo, J.E.  
Homologous recombination of adenovirus DNA in mammalian cells: enhanced recombination following UV-irradiation of the virus (274) 201
- Raman, M.J., see Godfrey, D.B. (274) 225
- Ramel, C. and Magnusson, J.  
Modulation of genotoxicity in *Drosophila* (267) 221
- Ramirez, O.O., see Graf, U. (266) 197
- Ramusino, M.C., see Crebelli, R. (266) 117
- Randerath, E., Danna, T.F. and Randerath, K.  
DNA damage induced by cigarette smoke condensate in vitro as assayed by  $^{32}$ P-postlabeling. Comparison with cigarette smoke-associated DNA adduct profiles in vivo (268) 139
- Randerath, E., see Randerath, K. (275) 355
- Randerath, K., Reddy, R., Danna, T.F., Watson, W.P., Crane, A.E. and Randerath, E.  
Formation of ribonucleotides in DNA modified by oxidative damage in vitro and in vivo. Characterization by  $^{32}$ P-postlabeling (275) 355
- Randerath, K., see Li, D. (275) 47
- Randerath, K., see Randerath, E. (268) 139
- Rannug, U., Bramstedt, H. and Nilsson, U.  
The presence of genotoxic and bioactive components in indigo dyed fabrics — a possible health risk? (282) 219
- Ranzani, G.N., see Shiloh, Y. (276) 329
- Rao, K.M., see Meshram, G.P. (279) 275
- Rao, S.R.V., see Sarkar, S. (282) 113
- Reclos, G.J., see Sarri, C. (270) 125
- Reddy, R., see Randerath, K. (275) 355
- Reed, E., see Dabholkar, M. (274) 45
- Reguly, M.L., see De Andrade, H.H.R. (279) 281
- Renzi, L., see Russo, A. (269) 119
- Retèl, J., see Lutgerink, J.T. (275) 377
- Reveillaud, I., see Fleming, J.E. (275) 267
- Rey, M., Palermo, A.M. and Muñoz, E.R.  
Nondisjunction induced by ethanol in *Drosophila melanogaster* females (268) 95
- Ribas, G., Torres, C., Batiste-Alentorn, M., Xamena, N., Creus, A. and Marcos, R.  
Germinal and somatic mutation induction in *Drosophila* after treatment of larvae with tritiated water (278) 43
- Ribas, G., see Torres, C. (280) 291
- Ribeiro, L.R., see Salvadori, D.M.F. (265) 237
- Riccio, M.L., Coratza, G., Bovalini, L. and Martelli, P.  
Investigation of the mutagenic activity in *Salmonella typhimurium* of the furochromone khellin, proposed as a therapeutic agent for skin diseases (279) 103
- Richard, M.-J., see Cadet, J. (275) 343
- Richter, C.  
Reactive oxygen and DNA damage in mitochondria (275) 249
- Rieger, R., Michaelis, A. and Takehisa, S.  
Low temperature between conditioning and challenge treatment prevents the 'adaptive response' of *Vicia faba* root tip meristem cells (282) 69
- Rizzi, R., see Lerda, D. (281) 31
- Rizzo, R., see Stefanini, M. (273) 119
- Robertson, L.W., see Glatt, H. (281) 151
- Robson, T., Hall, A. and Lohrer, H.  
Increased sensitivity of a Chinese hamster ovary cell line to alkylating agents after overexpression of the human metallothionein II-A gene (274) 177
- Rocchi, A., see Pelliccia, F. (282) 43
- Rodenburg, R.J.T., see Roelofs, H. (276) 241
- Rodrigues, A., see Rueff, J. (265) 75
- Rodrigues, A., see Rueff, J. (269) 243
- Rodriguez-Arnaiz, R., Morales, P.R. and Zimmering, S.  
Evaluation in *Drosophila melanogaster* of the mutagenic potential of furfural in the *mei-9<sup>a</sup>* test for chromosome loss in germ-line cells and the wing spot test for mutational activity in somatic cells (180) 75
- Rodriguez, H., Snow, E.T., Bhat, U. and Loechler, E.L.  
An *Escherichia coli* plasmid-based, mutational system in which *supF* mutants are selectable: Insertion elements dominate the spontaneous spectra (270) 219
- Rodriguez, R., see Rojas, E. (282) 283
- Rodríguez-Reyes, R., see Morales-Ramírez, P. (272) 215
- Rodríguez Mellado, J.M., see Dorado, L. (269) 301
- Roelofs, H., Tasseron-de Jong, J.G., Van der Wal-Aker, J., Rodenburg, R.J.T., Van Houten, G.B.M., Van de Putte, P. and Giphart-Gassler, M.  
Gene amplification in a human osteosarcoma cell line results in the persistence of the original chromosome and the formation of translocation chromosomes (276) 241
- Rogers, C.G., Boyes, B.G., Matula, T.I. and Stapley, R.  
Evaluation of genotoxicity of *tert*-butylhydroquinone in an hepatocyte-mediated assay with V79 Chinese hamster lung cells and in strain D7 of *Saccharomyces cerevisiae* (280) 17
- Rogiers, V., see Cornet, M. (271) 213
- Rojanapo, W., see Tepsuwan, A. (281) 55
- Rojas, A. and Fernández, S.I.  
No increase in chromosome aberrations in workers from an oil catalytic cracking plant (282) 209
- Rojas, A.  
No increase in chromosome aberrations in lymphocytes from workers exposed to nitrogen fertilisers (281) 133
- Rojas, E., Montero, R., Herrera, L.A., Sordo, M., Gonsebatt, M.E., Rodriguez, R. and Ostrosky-Wegman, P.  
Are mitotic index and lymphocyte proliferation kinetics reproducible endpoints in genetic toxicology testing? (282) 283
- Rojas, E., see Gonsebatt, M.E. (283) 91
- Rojas, E., see Herrera, L.A. (270) 211
- Rolfe, M., see Perry, M.E. (276) 189
- Roloff, B., Belluck, D. and Meisner, L.  
Cytogenetic effects of cyanazine and metolachlor on human lymphocytes exposed in vitro (281) 295
- Roloff, B., see Meisner, L.F. (283) 179

- Romagna, F., Matsumura, H., Watanabe, M., Kato, T., Shirasu, Y., Ohmori, K., Yamada, H. and Sasaki, Y.F.  
Micronucleus evaluation in peripheral blood reticulocytes of mice treated with procarbazine hydrochloride or mitomycin C (278) 197
- Ronai, Z., see Foiles, P.G. (279) 91
- Roninson, I.B.  
From amplification to function: the case of the *MDR1* gene (276) 151
- Röscheisen, C., see Speit, G. (283) 75
- Roscher, E. and Wiebel, F.J.  
Genotoxicity of 1,3- and 1,6-dinitropyrene: induction of micronuclei in a panel of mammalian test cell lines (278) 11
- Roschger, P., see Kimura, M. (281) 215
- Rosenkranz, H., see Claxton, L.D. (276) 61
- Rosenkranz, H.S. and Klopman, G.  
1,4-Dioxane: prediction of in vivo clastogenicity (280) 245
- Rosenkranz, H.S. and Klopman, G.  
Decreased electrophilicity of chemicals carcinogenic only at the maximum tolerated dose (282) 241
- Rosenkranz, H.S.  
Past plagues and modern biotechnology (282) 1
- Rosenkranz, H.S., see Klopman, G. (272) 59
- Rosenkranz, H.S., see Lewtas, J. (276) 3
- Rosenkranz, H.S., see Mersch-Sundermann, V. (265) 61
- Rosenkranz, H.S., see Yang, W.-L. (272) 111
- Rosin, M.P.  
The use of the micronucleus test on exfoliated cells to identify anti-clastogenic action in humans: a biological marker for the efficacy of chemopreventive agents (267) 265
- Rossiter, B.J.F., see Fuscoe, J.C. (269) 171
- Rotman, G., see Shiloh, Y. (276) 329
- Routledge, M.N., Garner, R.C., Jenkins, D. and Cuzick, J.  
<sup>32</sup>P-Postlabelling analysis of DNA from human tissues (282) 139
- Routsonis, K., see Petridou, M. (280) 143
- Rowe, T., see Green, M.H.L. (273) 137
- Rowland, I.R., see Alldrick, A.J. (268) 307
- Rowland, I.R., see Ho, T.A. (269) 279
- Ruan, C.-c., Liang, Y., Liu, J.-l., Tu, W.-s. and Liu, Z.-h.  
Antimutagenic effect of eight natural foods on moldy foods in a high liver cancer incidence area (279) 35
- Rubeš, J., Borkovec, L., Hořínová, Z., Urbanová, J., Prořková, I. and Kulíková, L.  
Cytogenetic monitoring of farm animals under conditions of environmental pollution (283) 199
- Rubiolo, P., Pieters, L., Calomme, M., Bicchi, C., Vlietinck, A. and Vanden Berghe, D.  
Mutagenicity of pyrrolizidine alkaloids in the *Salmonella typhimurium*/mammalian microsome system (281) 143
- Rudaitienė, S., see Lazutka, J.R. (268) 217
- Rueff, J., Laires, A., Gaspar, J., Borba, H. and Rodrigues, A.  
Oxygen species and the genotoxicity of quercetin (265) 75
- Rueff, J., Rodrigues, A., Laires, A. and Gaspar, J.  
Activation of promutagens by porphyrinic biomimetic systems (269) 243
- Ruiz, E.F., Rabago, V.M.E., Lecona, S.U., Perez, A.B. and Ma, T.-H.  
Tradescantia-micronucleus (Trad-MCN) bioassay on clastogenicity of wastewater and in situ monitoring (270) 45
- Ruiz Montoya, M., see Dorado, L. (269) 301
- Ruppová, K., see Slameňová, D. (279) 109
- Rusina, O.Y., Mirskaya, E.E., Andreeva, I.V. and Skavronskaya, A.G.  
Precise excision of transposons and point mutations induced by chemicals (283) 161
- Rusina, O.Y., see Slezáriková, V. (270) 145
- Russell, L.B., Hunsicker, P.R. and Shelby, M.D.  
Melfalan, a second chemical for which specific-locus mutation induction in the mouse is maximum in early spermatids (282) 151
- Russo, A. and Levis, A.G.  
Detection of aneuploidy in male germ cells of mice by means of a meiotic micronucleus assay (281) 187
- Russo, A., Stocco, A., Renzi, L., Bianco, N. and Majone, F.  
Persistence of chromosomal lesions induced in actively proliferating bone marrow cells of the mouse (269) 119
- Ryo, H., see Todo, T. (273) 85
- Sadagopa Ramanujam, V.M., see Ward Jr., J.B. (268) 49
- Sadler, B.M., see De Serres, F.J. (267) 105
- Sadler, B.M., see De Serres, F.J. (269) 149
- Safaev, R.D., see Fuchs, S.Y. (268) 155
- Safaev, R.D., see Fuchs, S.Y. (269) 185
- Saffran, W.A., Cantor, C.R., Smith, E.D. and Magdi, M.  
Psoralen damage-induced plasmid recombination in *Saccharomyces cerevisiae*: dependence on *RAD1* and *RAD52* (274) 1
- Sage, E., Cramb, E. and Glickman, B.W.  
The distribution of UV damage in the *lacI* gene of *Escherichia coli*: Correlation with mutation spectrum (269) 285
- Sai, K., Hayashi, M., Takagi, A., Hasegawa, R., Sofuni, T. and Kurokawa, Y.  
Effects of antioxidants on induction of micronuclei in rat peripheral blood reticulocytes by potassium bromate (269) 113
- Sai Sivam, S., see Giri, A.K. (278) 253
- Sakabe, Y., see Matsushita, H. (271) 1
- Sakaguchi, K., Zdzienicka, M.Z., Harris, P.V. and Boyd, J.B.  
Nuclease modification in Chinese hamster cells hypersensitive to DNA cross-linking agents — A model for Fanconi anemia (274) 11
- Sakai, S., see Kuramochi, M. (278) 121
- Sakai, Y., see Kuramochi, M. (278) 121
- Sakai, Y., see Sato, M. (265) 149
- Saksela, K., see Mäkelä, T.P. (276) 307
- Salaj-Šmic, E., see Brčić-Kostić, K. (281) 123
- Salamon, D.P., see Yamasaki, E.F. (266) 241
- Salamone, M.F., see Grant, W.F. (270) 53
- Salazar-Jacobo, M., see Morales-Ramírez, P. (279) 269
- Salganik, R.I. and Dianov, G.L.  
Molecular mechanisms of the formation of DNA double-



- strand breaks and induction of genomic rearrangements (266) 163
- Salles, B., see Puyo, M.-F. (282) 247
- Salonen, R., see Harjulehto-Mervaala, T. (275) 81
- Salvadori, D.M.F., Ribeiro, L.R., Oliveira, M.D.M., Pereira, C.A.B. and Beçak, W.  
The protective effect of  $\beta$ -carotene on genotoxicity induced by cyclophosphamide (265) 237
- Salvadori, M., see Dolara, P. (283) 113
- Sandermann Jr., H., see Gichner, T. (281) 203
- Sandhu, S.S., see Dhesi, J.S. (270) 79
- Sandhu, S.S., see Gill, B.S. (270) 65
- Sandhu, S.S., see Ma, T.-H. (270) 71
- Sankaranarayanan, K., see Czeizel, A. (270) 103
- Sano, M., see Shimoi, K. (266) 205
- Sano, Y., see Katoh, Y. (279) 239
- Santos, J.H., see De Andrade, H.H.R. (279) 281
- Santos-Mello, R. and Cavalcante, B.  
Cytogenetic studies on gas station attendants (280) 285
- Santos-Mello, R., Silva, J.C., Nunes, M.H. and Braga, M.A.  
Cytogenetics study on coke oven workers with abnormal blood counts (280) 261
- Sarafidou, E., see Sarri, C. (270) 125
- Sarasin, A., see Lehmann, A.R. (273) 1
- Sarasin, A., see Madzak, C. (274) 135
- Sarasin, A., see Sary, A. (272) 101
- Şardaş, S., Cuhruk, H., Karakaya, A.E. and Atakurt, Y.  
Sister-chromatid exchanges in operating room personnel (279) 117
- Sargent, L., see Meisner, L.F. (283) 179
- Sargentini, N.J. and Smith, K.C.  
Involvement of RecB-mediated (but not RecF-mediated) repair of DNA double-strand breaks in the  $\gamma$ -radiation production of long deletions in *Escherichia coli* (265) 83
- Sarin, R., see Lewtas, J. (276) 3
- Sarkar, F.H., Radcliff, G. and Callewaert, D.M.  
Purified prostaglandin synthase activates aromatic amines to derivatives that are mutagenic to *Salmonella typhimurium* (282) 273
- Sarkar, S. and Rao, S.R.V.  
Insect sex chromosomes, XI.  $^3\text{H}$ -TdR induces random aberrations in the X chromosome(s) of *Gryllotalpa fossor* (Orthoptera) (282) 113
- Sarri, C., Baxevanis, C.N., Côté, G.B., Reclos, G.J., Sarafidou, E., Spanos, T., Papanastasiou, M., Grigoriadou, M. and Papamichail, M.  
Sister-chromatid exchange in highly purified human  $\text{CD}_4^+$  and  $\text{CD}_8^+$  lymphocytes (270) 125
- Sarto, F., see Ballarin, C. (280) 1
- Sasagawa, S., see Fukushima, S. (275) 41
- Sasaki, M.S., see Kyoizumi, S. (265) 173
- Sasaki, Y.F., Yamada, H., Shimoi, K., Kinae, N., Tomita, I., Matsumura, H., Ohta, T. and Shirasu, Y.  
Enhancing effects of heterocyclic amines and  $\beta$ -carbolines on the induction of chromosome aberrations in cultured mammalian cells (269) 79
- Sasaki, Y.F., see Romagna, F. (278) 197
- Śasiadek, M.  
Cytogenetic studies of workers from the rubber industry (279) 195
- Šatava, J., see Angelis, K. (273) 271
- Sato, M., Sato, T., Ose, Y., Nagase, H., Kito, H. and Sakai, Y.  
Modulating effect of tanshinones on mutagenic activity of Trp-P-1 and benzo[a]pyrene in *Salmonella typhimurium* (265) 149
- Sato, M., see Yagi, T. (273) 213
- Sato, S., see Kondo, Y. (278) 187
- Sato, S.-i., Taketomi, M. and Morita, T.  
Simplified mouse peripheral reticulocyte micronucleus test with dimethylnitrosamine (278) 103
- Sato, T., see Hamasaki, T. (280) 195
- Sato, T., see Sato, M. (265) 149
- Satoh, Y., see Satokata, I. (273) 193
- Satokata, I., Tanaka, K., Miura, N., Narita, M., Mimaki, T., Satoh, Y., Kondo, S. and Okada, Y.  
Three nonsense mutations responsible for group A xeroderma pigmentosum (273) 193
- Satokata, I., Tanaka, K., Yuba, S. and Okada, Y.  
Identification of splicing mutations of the last nucleotides of exons, a nonsense mutation, and a missense mutation of the XPAC gene as causes of group A xeroderma pigmentosum (273) 203
- Savage, J.R.K., see Aghamohammadi, S.Z. (268) 223
- Savard, S., Otson, R. and Douglas, G.R.  
Mutagenicity and chemical analysis of sequential organic extracts of airborne particulates (276) 101
- Savelyeva, L., see Amler, L.C. (276) 291
- Sawada, M., Kitamura, R. and Kamataki, T.  
Stable expression of monkey cytochrome P-450IA1 cDNA in Chinese hamster CHL cells and its application for detection of mutagenicity of aflatoxin B<sub>1</sub> (265) 23
- Sawada, S., see Kurishita, A. (268) 323
- Saxén, L., see Harjulehto-Mervaala, T. (275) 81
- Sbrana, C., see Barrai, I. (267) 173
- Scapoli, C., see Barale, R. (271) 223
- Scapoli, C., see Barrai, I. (267) 173
- Schapira, A.H.V. and Cooper, J.M.  
Mitochondrial function in neurodegeneration and ageing (275) 133
- Scheid, W., see Traut, H. (272) 73
- Scheid, W., see Weber, J. (272) 31
- Schiffmann, D., see Stopper, H. (283) 21
- Schimke, R.T.  
Gene amplification; What are we learning? (276) 145
- Schlatter, J., see Würzler, F.E. (283) 107
- Schmid, E., see Bauchinger, M. (282) 231
- Schmid, E., see Braselmann, H. (283) 221
- Schmutte, C., see Blömeke, B. (265) 263
- Schneiderbanger, K., see Müller-Höcker, J. (275) 115
- Schober, S.E., see Schulte, P.A. (278) 237
- Schrader, T.J.  
Differences in nucleotide and base DNA excision repair observed during mitogenic stimulation of bovine lymphocytes (273) 29
- Schroeder-Kurth, M., see Nikischin, W. (268) 43
- Schubert, J., Pan, S.F. and Wald, N.  
Chromosome aberrations reduced in whole-body irradiated mice by pretreatment with cyanide (282) 107
- Schuetzle, D., see Lewtas, J. (276) 3
- Schuetzle, D., see May, W.E. (276) 11



- Schulte, P.A., Boeniger, M., Walker, J.T., Schober, S.E., Pereira, M.A., Gulati, D.K., Wojciechowski, J.P., Garza, A., Froelich, R., Strauss, G., Halperin, W.E., Herrick, R. and Griffith, J.  
Biologic markers in hospital workers exposed to low levels of ethylene oxide (278) 237
- Schwab, M., see Amler, L.C. (276) 291
- Schwartz, J.L., Moan, E., Mustafi, R., Fink, L. and Yasui, L.S.  
Faster rates of DNA unwinding under alkaline conditions in xrs-5 cells may reflect chromatin structure alterations (282) 13
- Sedliaková, M., see Mašek, F. (281) 63
- Sedliaková, M., see Slezáriková, V. (270) 145
- Seeberg, E., see Lehmann, A.R. (273) 1
- Seiber, J.N., see Kado, N.Y. (271) 253
- Seigle-Murandi, F., see Krivobok, S. (279) 1
- Seki, H., see Kuramochi, M. (278) 121
- Senft, V., Lošan, F. and Tuček, M.  
Cytogenetic analysis of chromosomal aberrations of peripheral lymphocytes in workers occupationally exposed to nickel (279) 171
- Sera, N., Fukuhara, K., Miyata, N., Horikawa, K. and Tokiwa, H.  
Mutagenicity of nitro-azabenz[a]pyrene and its related compounds (280) 81
- Sera, N., see Tokiwa, H. (276) 139
- Sestili, P., see Fiorani, M. (282) 25
- Seymour, C. and Mothersill, C.  
All colonies of CHO-K1 cells surviving  $\gamma$ -irradiation contain non-viable cells (267) 19
- Shadley, J.D. and Dai, G.  
Cytogenetic and survival adaptive responses in G<sub>1</sub> phase human lymphocytes (265) 273
- Shahin, M.M.  
The protective effect of 4-[(2-oxo-3-bornylidene)methyl]-phenyl trimethylammonium methylsulphate against the induction of gene mutations by ultraviolet, visible light and 8-methoxypsoralen in *Saccharomyces cerevisiae* (279) 49
- Shahin, M.M., see Mondon, P. (279) 121
- Shane, B.S., see Winston, G.W. (279) 289
- Shankel, D.M., see Kuo, S. (282) 93
- Shankel, D.M., see Mitscher, L.A. (267) 229
- Sharan, R.N. and Wary, K.K.  
Study of unscheduled DNA synthesis following exposure of human cells to arecoline and extracts of betel nut in vitro (278) 271
- Sharma, A., see Ganguly (Ghosh), B.B. (282) 61
- Sharma, T., see Rachel, A.J. (283) 193
- Sharpe, D.S., see Barnett, L.B. (282) 127
- Shay, J.W. and Werbin, H.  
New evidence for the insertion of mitochondrial DNA into the human genome: significance for cancer and aging (275) 227
- Shay, J.W., Werbin, H., Funk, W.D. and Wright, W.E.  
Cellular and molecular advances in elucidating p53 function (277) 163
- Shelby, M., see Lewtas, J. (276) 3
- Shelby, M.D., see Barnett, L.B. (282) 127
- Shelby, M.D., see McFee, A.F. (278) 61
- Shelby, M.D., see Russell, L.B. (282) 151
- Shephard, S., see Kálin, I. (283) 119
- Shepson, P., see Heddle, J.A. (272) 195
- Sheu, C.W., Lee, J.K., Arras, C.A., Jones, R.L. and Lavappa, K.S.  
Detection of vincristine-induced hyperploidy in meiotic II metaphases of male Chinese hamsters (280) 181
- Shibasaki, Y., see Amler, L.C. (276) 291
- Shibuya, T., see Hitotsumachi, S. (278) 113
- Shiloh, Y., Mor, O., Manor, A., Bar-Am, I., Rotman, G., Eubanks, J., Gutman, M., Ranzani, G.N., Houldsworth, J., Evans, G. and Avivi, L.  
DNA sequences amplified in cancer cells: an interface between tumor biology and human genome analysis (276) 329
- Shima, A., see Kubota, Y. (283) 263
- Shimada, A., see Kubota, Y. (283) 263
- Shimada, H., Suzuki, H., Itoh, S., Hattori, C., Matsuura, Y., Tada, S. and Watanabe, C.  
The micronucleus test of benzo[a]pyrene with mouse and rat peripheral blood reticulocytes (278) 165
- Shimada, T., see Imaoka, S. (269) 231
- Shimada, T., see Oda, Y. (272) 91
- Shimada, T., see Yamazaki, H. (272) 183
- Shimizu, H., see Claxton, L.D. (276) 23
- Shimizu, H., see Matsushita, H. (271) 1
- Shimizu, K., see Takeshita, T. (275) 21
- Shimoi, K., Akaiwa, E., Mori, N., Sano, M., Nakamura, Y. and Tomita, I.  
Bio-antimutagenic activities of vitamin B<sub>6</sub> in *E. coli* and mouse peripheral blood cells (266) 205
- Shimoi, K., Kawabata, H. and Tomita, I.  
Enhancing effect of heterocyclic amines and  $\beta$ -carboline on UV or chemically induced mutagenesis in *E. coli* (268) 287
- Shimoi, K., see Sasaki, Y.F. (269) 79
- Shimono, K., see Awogi, T. (278) 181
- Shinagawa, Y., see Kondo, Y. (278) 187
- Shinkawa, K., see Ohuchida, A. (278) 139
- Shiota, S., see Nakayama, H. (273) 43
- Shirasu, Y., see Romagna, F. (278) 197
- Shirasu, Y., see Sasaki, Y.F. (269) 79
- Shoffner, J.M., see Corral-Debrinski, M. (275) 169
- Shuker, D., see Chen, C.S. (265) 211
- Shwartz, H., see Skaliter, R. (267) 139
- Shy, C.M., see Tolbert, P.E. (271) 69
- Siebel-Sauer, A., see Nikischin, W. (268) 43
- Sies, H. and Menck, C.F.M.  
Singlet oxygen induced DNA damage (275) 367
- Silva, A.E., Manzato, A.J. and Varella-Garcia, M.  
Sister-chromatid exchanges in  $\beta$ -thalassaemic patients under conditions of in vivo and in vitro depletion of folic acid (282) 213
- Silva, J.C., see Santos-Mello, R. (280) 261
- Simeonova, M.I., see Blagoeva, P.M. (268) 77
- Simic, M.G.  
Urinary biomarkers and the rate of DNA damage in carcinogenesis and anticarcinogenesis (267) 277
- Simons, J.W.I.M., see Zdzienicka, M.Z. (273) 73

- Simpson, J.A., see Dean, R.T. (275) 387
- Simula, A.P. and Priestly, B.G.  
Species differences in the genotoxicity of cyclophosphamide and styrene in three in vivo assays (271) 49
- Sinet, P.-M., see Ceballos-Picot, I. (275) 281
- Sinsheimer, J.E., Hooberman, B.H., Das, S.K., Brezzell, M.D. and You, Z.  
The in vivo and in vitro genotoxicity of aromatic amines in relationship to the genotoxicity of benzidine (268) 255
- Sinues, B., Broto, A., Suarez, M.A., Duce, F., Martinez-Berganza, A. and Bernal, M.L.  
Cytogenetic study in peripheral blood lymphocytes from asthmatic patients receiving continued therapy with theophylline (280) 271
- Sipi, P., Järventaus, H. and Norppa, H.  
Sister-chromatid exchanges induced by vinyl esters and respective carboxylic acids in cultured human lymphocytes (279) 75
- Sivridis, E., see Lialiaris, T. (265) 155
- Skákal, I., see Angelis, K. (273) 271
- Skaliter, R., Eichenbaum, Z., Shwartz, H., Ascarelli-Goell, R. and Livneh, Z.  
Spontaneous transposition in the bacteriophage  $\lambda$  *cro* gene residing on a plasmid (267) 139
- Škara, M., see Fučić, A. (281) 129
- Škara, M., see Fučić, A. (282) 265
- Skavronskaya, A.G., see Rusina, O.Y. (283) 161
- Skavronskaya, A.G., see Slezáriková, V. (270) 145
- Skirpeczky, K., see Czeizel, A. (270) 103
- Skog, K., Knize, M.G., Felton, J.S. and Jägerstad, M.  
Formation of new heterocyclic amine mutagens by heating creatinine, alanine, threonine and glucose (268) 191
- Škorvaga, M., see Kleibl, K. (282) 39
- Slameňová, D., Gábelová, A. and Ruppová, K.  
Cytotoxicity and genotoxicity testing of sodium fluoride on Chinese hamster V79 cells and human EUE cells (279) 109
- Slezáriková, V., Sedláková, M., Andreeva, I.V., Rusina, O.Y. and Skavronskaya, A.G.  
Effect of plasmid pKM101 in ultraviolet irradiated *uvr*<sup>+</sup> and *uvr*<sup>-</sup> *Escherichia coli* (270) 145
- Smeets, I., see Lutgerink, J.T. (275) 377
- Smith, C., Payne, V., Doolittle, D.J., Debnath, A.K., Lawlor, T. and Hansch, C.  
Mutagenic activity of a series of synthetic and naturally occurring heterocyclic amines in *Salmonella* (279) 61
- Smith, C.A., see Lehmann, A.R. (273) 1
- Smith, E.D., see Saffran, W.A. (274) 1
- Smith, K.A., see Toledo, F. (276) 261
- Smith, K.C.  
Spontaneous mutagenesis: Experimental, genetic and other factors (277) 139
- Smith, K.C., see Obaseki-Ebor, E.E. (267) 67
- Smith, K.C., see Sargentini, N.J. (265) 83
- Smith, M.G., see Murphy, S.A. (271) 39
- Smith-Sørensen, B., Hovig, E., Andersson, B. and Børresen, A.-L.  
Screening for mutations in human HPRT cDNA using the polymerase chain reaction (PCR) in combination with constant denaturant gel electrophoresis (CDGE) (269) 41
- Snow, E.T., see Rodriguez, H. (270) 219
- Sobels, F.H., see De Flora, S. (267) 153
- Söderpalm-Berndes, C., see Önfelt, A. (281) 267
- Sofuni, T., see Asita, A.O. (271) 29
- Sofuni, T., see Hayashi, M. (278) 209
- Sofuni, T., see Matsuoka, A. (272) 223
- Sofuni, T., see Sai, K. (269) 113
- Sofuni, T., see Suzuki, T. (278) 169
- Sofuni, T., see Yamada, M. (283) 29
- Sohal, R.S. and Brunk, U.T.  
Mitochondrial production of pro-oxidants and cellular senescence (275) 295
- Sohal, R.S., see Brunk, U.T. (275) 395
- Sokova, O.I., see Kopnin, B.P. (276) 163
- Sordo, M., see Rojas, E. (282) 283
- Soreq, H., see Zakut, H. (276) 275
- Sorsa, M., Autio, K., Abbondandolo, A., Carbonell, E., Demopoulos, N., Garner, C., Kirsch-Volders, M., Marcos, R., Marafante, E., Natarajan, A.T., Parry, E.M., Psaraki, K., Stephanou, G., Bates, A.D. and Waters, R.  
Evaluation of in vitro cytogenetic techniques in nine European laboratories in relation to chromosomal endpoints induced by three model mutagens (271) 261
- Sorsa, M., see Nylund, L. (265) 223
- Sorsa, M., see Nylund, L. (276) 125
- Spanos, T., see Sarri, C. (270) 125
- Speit, G., Menz, W., Röscheisen, C. and Köberle, B.  
Cytogenetic and molecular characterization of the mutagenicity of chlorambucil in V79 cells (283) 75
- Spiegelman, V.S., see Fuchs, S.Y. (268) 155
- Spiegelman, V.S., see Fuchs, S.Y. (269) 185
- Squires, S., see Johnson, R.T. (273) 97
- Sram, R., see Natarajan, A.T. (271) 115
- Srivastava, S., see Chakravarty, B. (283) 287
- Stacey, N.H., see Croker, P. (283) 7
- Stack, H.F., see Brockman, H.E. (267) 157
- Ståhl, F., see Levan, G. (276) 285
- Stapley, R., see Rogers, C.G. (280) 17
- Stark, G.R., see Perry, M.E. (276) 189
- Stary, A., Menck, C.F.M. and Sarasin, A.  
Description of a new amplifiable shuttle vector for mutagenesis studies in human cells: application to *N*-methyl-*N'*-nitro-*N*-nitrosoguanidine-induced mutation spectrum (272) 101
- Stecca, C., see Jacono, F.L. (268) 21
- Steele, V.E., see Boone, C.W. (267) 251
- Steele, V.E., see Kelloff, G.J. (267) 291
- Stefani, F.H., see Müller-Höcker, J. (275) 115
- Stefanini, M., Giliani, S., Nardo, T., Marinoni, S., Nazzaro, V., Rizzo, R. and Trevisan, G.  
DNA repair investigations in nine Italian patients affected by trichothiodystrophy (273) 119
- Stefanini, M., see Casati, A. (275) 7
- Stefanini, M., see Lehmann, A.R. (273) 1
- Stegnar, P., see Al-Sabti, K. (280) 215
- Steiman, R., see Krivobok, S. (279) 1
- Stenhuis, W., see Gorgels, W.J.M.J. (279) 233
- Stensman, C., see Agurell, E. (276) 87
- Stephanou, G., see Sorsa, M. (271) 261



- Stephens, G., see Cole, J. (273) 171
- Sterner, O., see Morales, P. (268) 315
- Stevens, D.L., see Aghamohammadi, S.Z. (269) 1
- Stewart, G., see Mitscher, L.A. (267) 229
- Stewart, J.D., see Whong, W.-Z. (283) 1
- Stocco, A., see Russo, A. (269) 119
- Stojilković, I., see Brčić-Kostić, K. (281) 123
- Stoltz, S.L., see Bagley, S.T. (276) 81
- Stookey, G., see Dunipace, A.J. (279) 255
- Stopper, H., Pechan, R. and Schiffmann, D.  
5-Azacytidine induces micronuclei in and morphological transformation of Syrian hamster embryo fibroblasts in the absence of unscheduled DNA synthesis (283) 21
- Strauss, G., see Schulte, P.A. (278) 237
- Strauss, G.H.S., see Tice, R.R. (271) 101
- Strauss, G.H.S., see Vijayalaxmi (271) 243
- Strong, L.C., see Troilo, P. (283) 237
- Suarez, M.A., see Sinues, B. (280) 271
- Subba Rao, K. and Loeb, L.A.  
DNA damage and repair in brain: relationship to aging (275) 317
- Subbota, R.P., see Gubenko, I.S. (282) 197
- Sugiyama, C., Miyamae, Y., Kobayashi, H., Fujino, Y., Mori, M. and Ohara, K.  
The micronucleus test of methyl methanesulfonate with mouse peripheral blood reticulocytes using acridine orange-coated slides (278) 117
- Sugiyama, M., Tsuzuki, K., Lin, X. and Costa, M.  
Potentiation of sodium chromate(VI)-induced chromosomal aberrations and mutation by vitamin B<sub>2</sub> in Chinese hamster V79 cells (283) 211
- Sun, K., see Zhang, Y. (281) 25
- Sun, W., see Ma, T.-H. (270) 39
- Susánszky, É., see Czeizel, A.E. (269) 35
- Suslova, T.B., see Korkina, L.G. (265) 245
- Sutou, S., see Higashikuni, N. (278) 159
- Suwa, Y., see Kako, Y. (282) 119
- Suzuki, H., see Shimada, H. (278) 165
- Suzuki, J., Kuwayama, K. and Suzuki, S.  
Mutagenicity assay for nitroarenes of air pollutants held in leaves of woody plants (271) 89
- Suzuki, S., see Hatakeyama, Y. (278) 193
- Suzuki, S., see Suzuki, J. (271) 89
- Suzuki, T., Tamai, K., Kodama, Y., Asita, A.O., Matsuoka, A., Sofuni, T., Kurita, M., Ohtsuki, H., Hiwatashi, T. and Hayashi, M.  
Micronucleus induction in mouse peripheral reticulocytes by 7,12-dimethylbenz[*a*]anthracene (278) 169
- Suzuki, T., see Asita, A.O. (271) 29
- Suzuki, T., see Hayashi, M. (278) 209
- Suzuki, T., see Matsuoka, A. (272) 223
- Suzutani, T. and Machida, H.  
Analysis of toxic and mutagenic activities of antiherpesvirus nucleosides against HeLa cells and herpes simplex virus type 1 (267) 125
- Sýkora, I. and Gandalovičová, D.  
Trichlormethine hydrochloride and correlation of its mutagenic and toxic effects on male germ cells in mice (266) 291
- Sysmans, M., see Vanparys, P. (282) 191
- Szabados, Á., see Czeizel, A.E. (269) 35
- Szakmary, A., see Knasmüller, S. (280) 93
- Szekely, J.G., Goodwin, M. and Delaney, S.  
The effect of  $\gamma$ -irradiation on the toxicity of malathion in V79 Chinese hamster cells and Molt-4 human lymphocytes (280) 187
- Szepietowski, P., see Gaudray, P. (276) 317
- Szymczyk, T., see Peryt, B. (269) 201
- Tachibana, A., see Fujimori, A. (269) 55
- Tada, M., see Kojima, M. (274) 65
- Tada, S., see Shimada, H. (278) 165
- Tadi, P.P., see Wong, B.Y.Y. (279) 209
- Taipale, H., see Von Wright, A. (269) 27
- Takagi, A., see Sai, K. (269) 113
- Takebe, H., see Yagi, T. (273) 213
- Takehisa, S., see Kanaya, N. (281) 47
- Takehisa, S., see Rieger, R. (282) 69
- Takenaka, A., see Oya, Y. (266) 281
- Takeshita, T., Ariizumi-Shibusawa, C., Shimizu, K., Hoshino, H., Yamagata, Z., Iijima, S., Asaka, A. and Higurashi, M.  
The effect of aging on cell-cycle kinetics and X-ray-induced chromosome aberrations in cultured lymphocytes from patients with Down syndrome (275) 21
- Taketomi, M., see Sato, S.-i. (278) 103
- Takeuchi, M., see Yamamura, E. (278) 127
- Takiguchi, D., see Wu, F.-y. (283) 65
- Talukdar, G., see Ganguly (Ghosh), B.B. (282) 61
- Tamai, K., Tezuka, H. and Kuroda, Y.  
Different modifications by vanillin in cytotoxicity and genetic changes induced by EMS and H<sub>2</sub>O<sub>2</sub> in cultured Chinese hamster cells (268) 231
- Tamai, K., see Suzuki, T. (278) 169
- Tamakawa, K., see Matsushita, H. (271) 1
- Tamura, H., see Iwakura, K. (278) 131
- Tamura, N., Aoki, K. and Lee, M.-S.  
Selective reactivities of isocyanates towards DNA bases and genotoxicity of methylcarbamoylation of DNA (283) 97
- Tanaka, K.  
Joint Workshop on DNA repair mechanisms and embryo manipulation. Report of the Third Annual Workshop of the Institute for Molecular and Cellular Biology, Osaka University, held in Osaka (Japan), 21-23 January 1991 (273) 237
- Tanaka, K., see Eker, A.P.M. (274) 211
- Tanaka, K., see Satokata, I. (273) 193
- Tanaka, K., see Satokata, I. (273) 203
- Tandon, J.K., see Taneja, N. (283) 233
- Taneja, N., Kucheria, K., Jain, S., Tandon, J.K. and Maheshwari, M.C.  
Sister-chromatid exchanges are increased in epileptics, but not by sodium valproate (283) 233
- Taningher, M., Pasquini, R., Tanzi, M.C. and Bonatti, S.  
Genotoxicity of *N*-acryloyl-*N'*-phenylpiperazine, a redox activator for acrylic resin polymerization (282) 99
- Tano, K., see Wang, Y. (273) 221
- Tanzi, M.C., see Taningher, M. (282) 99



- Tapia P., F., Madrigal-Bujaidar, E. and Aguirre V., S.  
The effect of tequila in the synaptonemal complex structure of mouse spermatocytes (281) 283
- Tasseront-de Jong, J.G., see Roelofs, H. (276) 241
- Tates, A.D., see Sorsa, M. (271) 261
- Tates, A.D., see Van Dam, F.J. (271) 231
- Tatsumi, K., see Fujimori, A. (269) 55
- Tatsumi-Miyajima, J., see Yagi, T. (273) 213
- Taverna, P., see Pardini, C. (283) 125
- Tawn, E.J. and Earl, R.  
The frequencies of constitutional chromosome abnormalities in an apparently normal adult population (283) 69
- Taylor-Mayer, R.E., see Mayer, V.W. (279) 41
- Tazawa, T., see Kuramochi, M. (278) 121
- Teel, R.W., see Wong, B.Y.Y. (279) 209
- Telikepalli, H., see Kuo, S. (282) 93
- Telikepalli, H., see Mitscher, L.A. (267) 229
- Tepsuwan, A., Furihata, C., Rojanapo, W. and Matsushima, T.  
Genotoxicity and cell proliferative activity of a nitrosated *Oroxylum indicum* Vent fraction in the pyloric mucosa of rat stomach (281) 55
- Testa, A., see De Marco, A. (279) 9
- Tezuka, H., see Kuroda, Y. (267) 201
- Tezuka, H., see Tamai, K. (268) 231
- Thacker, J., see Aghamohammadi, S.Z. (269) 1
- The Collaborative Study Group for the Micronucleus Test,  
Micronucleus test with mouse peripheral blood erythrocytes by acridine orange supravital staining: The summary report of the 5th collaborative study by CSGMT/JEMS · MMS (278) 83
- Theillet, C., see Gaudray, P. (276) 317
- Theiss, J.C., see Ciaravino, V. (280) 205
- Theiss, J.C., see Krishna, G. (282) 159
- Theiss, J.C., see Krishna, G. (282) 79
- Theiss, J.C., see Kropko, M.L. (281) 233
- Thompson, D.C., Josephy, P.D., Chu, J.W.K. and Eling, T.E.  
Enhanced mutagenicity of anisidine isomers in bacterial strains containing elevated *N*-acetyltransferase activity (279) 83
- Thompson, L.H., see Lehmann, A.R. (273) 1
- Thorsness, P.E.  
Structural dynamics of the mitochondrial compartment (275) 237
- Tice, R.R., Strauss, G.H.S. and Peters, W.P.  
High-dose combination alkylating agents with autologous bone-marrow support in patients with breast cancer: preliminary assessment of DNA damage in individual peripheral blood lymphocytes using the single cell gel electrophoresis assay (271) 101
- Tice, R.R., see McFee, A.F. (278) 61
- Tice, R.R., see Murphy, S.A. (271) 39
- Tice, R.R., see Vijayalaxmi (271) 243
- Timmerman, A.J., see Van Loon, A.A.W.M. (274) 19
- Tiveron, C., Marchetti, F., Bassani, B. and Pacchierotti, F.  
Griseofulvin-induced aneuploidy and meiotic delay in female mouse germ cells. I. Cytogenetic analysis of metaphase II oocytes (266) 143
- Tiveron, C., see Marchetti, F. (266) 151
- Todo, T. and Ryo, H.  
Identification of cellular factors that recognize UV-damaged DNA in *Drosophila melanogaster* (273) 85
- Tohda, H., see Zhao, J.H. (282) 49
- Tokiwa, H., Horikawa, K. and Sera, N.  
Influence of the microsomal inducer and the incubation system on mutagenicity of complex mixtures (276) 139
- Tokiwa, H., see Claxton, L.D. (276) 23
- Tokiwa, H., see Matsushita, H. (271) 1
- Tokiwa, H., see Sera, N. (280) 81
- Tolbert, P.E., Shy, C.M. and Allen, J.W.  
Micronuclei and other nuclear anomalies in buccal smears: methods development (271) 69
- Toledo, F., Smith, K.A., Buttin, G. and Debatisse, M.  
The evolution of the amplified adenylate deaminase 2 domains in Chinese hamster cells suggests the sequential operation of different mechanisms of DNA amplification (276) 261
- Tomita, I., see Sasaki, Y.F. (269) 79
- Tomita, I., see Shimoi, K. (266) 205
- Tomita, I., see Shimoi, K. (268) 287
- Torres, C., Ribas, G., Xamena, N., Creus, A. and Marcos, R.  
Genotoxicity of four herbicides in the *Drosophila* wing spot test (280) 291
- Torres, C., see Ribas, G. (278) 43
- Torricelli, F., see Dolara, P. (283) 113
- Towers, N.R., see Ferguson, L.R. (268) 199
- Toyoda, Y., see Hatanaka, Y. (278) 99
- Toyoda, Y., see Kako, Y. (282) 119
- Traut, H. and Scheid, W.  
Significance testing in mutagen screening: the dependence of statistical power on the control sample size (272) 73
- Traut, H., see Weber, J. (272) 31
- Travis, C.C., Wang, L.A. and Morris, J.M.  
Comparison of the Gene-Tox and RTECS data bases as predictors of carcinogenic potency (279) 261
- Traynor, C.A., see Winston, G.W. (279) 289
- Trebatická, M., see Miadoková, E. (280) 161
- Trevisan, G., see Stefanini, M. (273) 119
- Trgovčević, Ž., see Brčić-Kostić, K. (281) 123
- Trinca, S., see De Marco, A. (279) 9
- Tripathy, N.K. and Patnaik, K.K.  
Studies on the genotoxicity of monocrotophos in somatic and germ-line cells of *Drosophila* (278) 23
- Tripathy, N.K., see Patnaik, K.K. (279) 15
- Troilo, P., Strong, L.C., Little, J.B. and Nichols, W.W.  
Spontaneous and induced levels of chromosomal aberration and sister-chromatid exchange in neurofibromatosis: No evidence of chromosomal hypersensitivity (283) 237
- Tromelin, A., see Castelain, P. (280) 9
- Trottier, Y., Waithe, W.I. and Anderson, A.  
The detection of promutagen activation by extracts of cells expressing cytochrome P450IA2 cDNA: preincubation dramatically increases revertant yield in the Ames test (281) 39
- Tseng, S.-F., see Lin, J.-K. (265) 203
- Tsolaki, M., see Petridou, M. (280) 143
- Tsongalis, G.J., see Lambert, M.W. (273) 57
- Tsujii, Y., see Megumi, T. (274) 73

- Tsuzuki, K., see Sugiyama, M. (283) 211
- Tu, W.-s., see Ruan, C.-c. (279) 35
- Tuček, M., see Senft, V. (279) 171
- Tuppurainen, K., Lötjönen, S., Laatikainen, R. and Vartiainen, T.  
Structural and electronic properties of MX compounds related to TA100 mutagenicity. A semi-empirical molecular orbital QSAR study (266) 181
- Turchi, G., Nardone, A. and Palitti, F.  
Application of an epithelial liver cell line, metabolically competent, for mutation studies of promutagens (271) 79
- Turner, D.R., see Grist, S.A. (266) 189
- Turner, P.M., see Ferguson, L.R. (265) 181
- Uchida, T., see Fukuta, H. (269) 97
- Uejima, M., see Awogi, T. (278) 181
- Ueno, Y., see Akuzawa, S. (266) 63
- Ugnivenko, H.G., see Fuchs, S.Y. (268) 155
- Umeki, S., see Kyoizumi, S. (265) 173
- Umez, K., see Nakayama, H. (273) 43
- Urbanová, J., see Rubeš, J. (283) 199
- Urlando, C., see Heddle, J.A. (272) 195
- Uziel, M., Munro, N.B., Katz, D.S., Vo-Dinh, T., Zeighami, E.A., Waters, M.D. and Griffith, J.D.  
DNA adduct formation by 12 chemicals with populations potentially suitable for molecular epidemiological studies (277) 35
- Uzhashi, T., see Iwamoto, Y. (280) 233
- Vallarino-Kelly, T., see Morales-Ramírez, P. (272) 215
- Van Berkel, C.G.M., see Gille, J.J.P. (275) 31
- Van Bladeren, P.J., see Willems, M.I. (278) 227
- Van Bruchem, M.C., see Voogd, C.E. (282) 73
- Van Dam, F.J., Natarajan, A.T. and Bates, A.D.  
Use of a T-lymphocyte clonal assay for determining HPRT mutant frequencies in individual rats (271) 231
- Van den Akker, E., see Lutgerink, J.T. (275) 377
- Vanden Berghe, D., see Rubiolo, P. (281) 143
- Van de Putte, P., see Roelofs, H. (276) 241
- Van der Gen, A., see Vertegaal, L.B.J. (281) 93
- Van der Hoeven, J.C.M., see Van Erp, Y.H.M. (271) 201
- Van der Schans, G.P., see Lehmann, A.R. (273) 1
- Van der Schans, G.P., see Van Loon, A.A.W.M. (274) 19
- Van der Stel, J.J., see Voogd, C.E. (282) 73
- Van der Wal-Aker, J., see Roelofs, H. (276) 241
- Van Dijk, P., see Lutgerink, J.T. (275) 377
- Van Erp, Y.H.M., Koopmans, M.J.E., Heirbaut, P.R.C.M., Van der Hoeven, J.C.M. and Weterings, P.J.J.M.  
Unscheduled DNA synthesis in human hair follicles after in vitro exposure to 11 chemicals: comparison with unscheduled DNA synthesis in rat hepatocytes (271) 201
- Van Hoffen, A., see Zdzienicka, M.Z. (273) 73
- Van Houten, G.B.M., see Roelofs, H. (276) 241
- Van Hummelen, P., Deleener, A., Vanparys, P. and Kirsch-Volders, M.  
Discrimination of aneuploidogens from clastogens by C-banding, DNA and area measurements of micronuclei from mouse bone marrow (271) 13
- Van Loon, A.A.W.M., Groenendijk, R.H., Timmerman, A.J., Van der Schans, G.P., Lohman, P.H.M. and Baan, R.A.  
Quantitative detection of DNA damage in cells after exposure to ionizing radiation by means of an improved immunochemical assay (274) 19
- Vanparys, P., Deknudt, G., Vermeiren, F., Sysmans, M. and Marsboom, R.  
Sampling times in micronucleus testing (282) 191
- Vanparys, P., see Van Hummelen, P. (271) 13
- Van Poppel, G., see Gorgels, W.J.M.J. (279) 233
- Van Rensburg, C.E.J., Van Staden, A.M., Anderson, R. and Van Rensburg, E.J.  
Hypochlorous acid potentiates hydrogen peroxide-mediated DNA-strand breaks in human mononuclear leucocytes (265) 255
- Van Rensburg, E.J., see Van Rensburg, C.E.J. (265) 255
- Van Schaik, N., see Graf, U. (271) 59
- Van Schooten, F.J., see Paleologo, M. (281) 11
- Van Staden, A.M., see Van Rensburg, C.E.J. (265) 255
- Van Zeeland, A.A., see Jansen, J.G. (266) 105
- Van Zeeland, A.A., see Lehmann, A.R. (273) 1
- Van Zeeland, A.A., see Natarajan, A.T. (272) 193
- Van Zeeland, A.A., see Vrieling, H. (274) 147
- Van Zeeland, A.A., see Zdzienicka, M.Z. (273) 73
- Varella-Garcia, M., see Silva, A.E. (282) 213
- Vartiainen, T., see Tuppurainen, K. (266) 181
- Vasudev, V., see Mahmood, R. (283) 243
- Vatteroni, L., see Rainaldi, G. (266) 273
- Vega, L., see Gonshebbat, M.E. (283) 91
- Velemínský, J., see Angelis, K. (273) 271
- Venema, J., see Zdzienicka, M.Z. (273) 73
- Ventura, L., see Barale, R. (271) 223
- Vercruysse, A., see Cornet, M. (271) 213
- Vermeiren, F., see Vanparys, P. (282) 191
- Vermeulen, W., see Eker, A.P.M. (274) 211
- Vertegaal, L.B.J., Voogd, C.E., Mohn, G.R. and Van der Gen, A.  
Further studies on the mutagenic activity of fecapentaene-12 analogues and conclusions about their molecular mode of action (281) 93
- Vetrano, F., see Fiorani, M. (282) 25
- Viaggi, S., Nüsse, M., Ottaggio, L. and Bonatti, S.  
Chromosome rearrangements associated with CAD gene amplification. Experiments with cell hybrids (265) 9
- Victorin, K.  
Review of the genotoxicity of ozone (277) 221
- Vijayalaxmi, Tice, R.R. and Strauss, G.H.S.  
Assessment of radiation-induced DNA damage in human blood lymphocytes using the single-cell gel electrophoresis technique (271) 243
- Vijayalaxmi, K.K., see Mathew, G. (280) 169
- Villalobos-Pietrini, R., see Gómez-Arroyo, S. (281) 173
- Villamil, E., see Carballo, M. (279) 245
- Villaverde, A. and Barbé, J.  
SOS system induction in *Escherichia coli* cells with distinct levels of ribonucleotide reductase activity (281) 137
- Vink, G.J., see Claxton, L.D. (276) 23
- Vlasák, J., see Angelis, K. (273) 271
- Vlček, D., see Miadoková, E. (280) 161



- Vlčková, V., see Miadoková, E. (280) 161  
 Vlietinck, A., see Rubiolo, P. (281) 143  
 Vo-Dinh, T., see Uziel, M. (277) 35  
 Vogel, E.W., see Natarajan, A.T. (272) 193  
 Voliani, M., see Pardini, C. (275) 1  
 Voliani, M., see Pardini, C. (283) 125  
 Von Borstel, R.C., see Ferguson, L.R. (265) 103  
 Von der Hude, W., Carstensen, S., Gürtler, R. and Obe, G.  
 Structure-activity relationships of epoxides: induction of sister-chromatid exchanges in V79 cells by enantiomeric epoxides (278) 289  
 Von Wright, A., Raatikainen, O., Taipale, H., Kärenlampi, S. and Mäki-Paakkanen, J.  
 Directly acting geno- and cytotoxic agents from a wild mushroom *Dermocybe sanguinea* (269) 27  
 Voogd, C.E., Van der Stel, J.J. and Van Bruchem, M.C.  
 Increased mutagenicity of some nitroimidazoles by non-mutagenic nitrotoluene on *Klebsiella pneumoniae* (fluctuation test) (282) 73  
 Voogd, C.E., see Vertegaal, L.B.J. (281) 93  
 Vrieling, H., Zhang, L.-H., Van Zeeland, A.A. and Zdzienicka, M.Z.  
 UV-induced *hprt* mutations in a UV-sensitive hamster cell line from complementation group 3 are biased towards the transcribed strand (274) 147  
 Vrieling, H., see Jansen, J.G. (266) 105  
 Vrieling, H., see Zdzienicka, M.Z. (273) 73
- Wahl, G.M., see Kimmel, M. (276) 225  
 Wahl, G.M., see Windle, B.E. (276) 199  
 Waithe, W.I., see Trottier, Y. (281) 39  
 Wakata, A., see Kasahara, Y. (278) 145  
 Wakisaka, A., see Kushiro, J.-i. (272) 17  
 Wald, N., see Schubert, J. (282) 107  
 Walker, J.T., see Schulte, P.A. (278) 237  
 Wallace, D.C., see Corral-Debrinski, M. (275) 169  
 Wallace, S.S., see Chen, B.-X. (273) 253  
 Wallace, W.E., see Gu, Z.-W. (279) 217  
 Wallace, W.E., see Gu, Z.-W. (279) 55  
 Wang, L.A., see Travis, C.C. (279) 261  
 Wang, P.B.-B., see Mitscher, L.A. (267) 229  
 Wang, S., see Xue, K.-X. (278) 259  
 Wang, Y., Kato, T., Ayaki, H., Ishizaki, K., Tano, K., Mitra, S. and Ikenaga, M.  
 Correlation between DNA methylation and expression of *O*<sup>6</sup>-methylguanine-DNA methyltransferase gene in cultured human tumor cells (273) 221  
 Wang, Y., see Cheong, N. (274) 111  
 Wang, Y., see Claxton, L.D. (276) 23  
 Wani, A.A., see Yamasaki, E.F. (266) 241  
 Ward Jr., J.B., Ammenheuser, M.M., Sadagopa Ramanujam, V.M., Morris, D.L., Whorton Jr., E.B. and Legator, M.S.  
 The mutagenic effects of low level sub-acute inhalation exposure to benzene in CD-1 mice (268) 49  
 Warshawsky, D., see Claxton, L.D. (276) 23  
 Wary, K.K., see Sharan, R.N. (278) 271  
 Wassermann, K., see Knudsen, L.E. (279) 129  
 Watanabe, C., see Shimada, H. (278) 165  
 Watanabe, M., see Oda, Y. (272) 91  
 Watanabe, M., see Ohuchida, A. (278) 139  
 Watanabe, M., see Romagna, F. (278) 197  
 Watanabe, S., see Kishi, M. (278) 205  
 Watanabe, T. and Hirayama, T.  
 Mutagenicity of nitro derivatives produced by exposure of dibenzofuran to nitrogen oxides (283) 35  
 Watanabe, T., Kusumoto, M., Ikeda, M. and Hirayama, T.  
 Mutagenicity of the reaction products of dibenzo-*p*-dioxin with nitrogen oxides (281) 247  
 Wataya, Y., see Arimoto, S. (282) 177  
 Waters, M.D., see Brockman, H.E. (267) 157  
 Waters, M.D., see Brusick, D.J. (266) 1  
 Waters, M.D., see Lohman, P.H.M. (266) 7  
 Waters, M.D., see Uziel, M. (277) 35  
 Waters, R., Jones, C.J., Martin, E.A., Yang, A.-L. and Jones, N.J.  
 The repair of large DNA adducts in mammalian cells (273) 145  
 Waters, R., see Martin, E.A. (273) 243  
 Waters, R., see Sorsa, M. (271) 261  
 Watson, W.P., see Randerath, K. (275) 355  
 Waugh, A.P.W., see Cole, J. (273) 171  
 Weber, C.A., see Lehmann, A.R. (273) 1  
 Weber, J., Scheid, W. and Traut, H.  
 Time-saving in biological dosimetry by using the automatic metaphase finder Metafer2 (272) 31  
 Wei, Y.-H.  
 Mitochondrial DNA alterations as ageing-associated molecular events (275) 145  
 Wein, H., see Keeney, S. (273) 49  
 Weis, J., see Berryman, S.H. (278) 47  
 Welker, D.L., see Bronner, C.E. (274) 187  
 Werbin, H., see Shay, J.W. (275) 227  
 Werbin, H., see Shay, J.W. (277) 163  
 Westendorf, J., see Blömeke, B. (265) 263  
 Westmoreland, C. and Gatehouse, D.  
 D and C Red No. 9: Genotoxic or non-genotoxic carcinogen? (281) 163  
 Weterings, P.J.J.M., see Van Erp, Y.H.M. (271) 201  
 Wettergren, Y., see Levan, G. (276) 285  
 Whong, W.-Z., Stewart, J.D. and Ong, T.  
 Comparison of DNA adduct detection between two enhancement methods of the <sup>32</sup>P-postlabelling assay in rat lung cells (283) 1  
 Whong, W.-Z., see Gu, Z.-W. (279) 217  
 Whong, W.-Z., see Gu, Z.-W. (279) 55  
 Whorton Jr., E.B., see Ward Jr., J.B. (268) 49  
 Wiberg, K., see Önfelt, A. (281) 267  
 Wiebel, F.J., see Roscher, E. (278) 11  
 Wilhardt, P., see Knudsen, L.E. (279) 129  
 Willems, M.I., Dubois, G., Boyd, D.R., Davies, R.J.H., Hamilton, L., McCullough, J.J. and Van Bladeren, P.J.  
 Comparison of the mutagenicity of quinoline and all monohydroxyquinolines with a series of arene oxide, *trans*-dihydrodiol, diol epoxide, *N*-oxide and arene hydrate derivatives of quinoline in the Ames/Salmonella microsome test (278) 227  
 Williams, G.M., see Alvi, N.K. (265) 283



- Wilmer, J.L., Colvin, O.M. and Bloom, S.E.  
Cytogenetic mechanisms in the selective toxicity of cyclophosphamide analogs and metabolites towards avian embryonic B lymphocytes in vivo (268) 115
- Windle, B.E. and Wahl, G.M.  
Molecular dissection of mammalian gene amplification: New mechanistic insights revealed by analyses of very early events (276) 199
- Winston, G.W., Traynor, C.A., Shane, B.S. and Hajos, A.K.D.  
Modulation of the mutagenicity of three dinitropyrene isomers in vitro by rat-liver S9, cytosolic, and microsomal fractions following chronic ethanol ingestion (279) 289
- Wise, J.P., Leonard, J.C. and Patierno, S.R.  
Clastogenicity of lead chromate particles in hamster and human cells (278) 69
- Wise, J.P., see Xu, J. (280) 129
- Wise, L.D., see Kropko, M.L. (281) 233
- Wise, S.A., see May, W.E. (276) 11
- Witt, K.L., Bishop, J.B., McFee, A.F. and Kumaroo, V.  
Induction of chromosomal damage in mammalian cells in vitro and in vivo by sulfapyridine or 5-aminosalicylic acid (283) 59
- Witt, K.L., Gudi, R. and Bishop, J.B.  
Induction of kinetochore positive and negative micronuclei in mouse bone marrow cells by salicylazosulfapyridine and sulfapyridine (283) 53
- Wojciechowski, J.P., see Schulte, P.A. (278) 237
- Wold, S., see Kropko, M.L. (281) 233
- Wolleb, U., see Minnunni, M. (269) 193
- Wong, B.Y.Y., Lau, B.H.S., Tadi, P.P. and Teel, R.W.  
Chinese medicinal herbs modulate mutagenesis, DNA binding and metabolism of aflatoxin B<sub>1</sub> (279) 209
- Wong, J.M., see Kado, N.Y. (271) 253
- Woodgate, R.  
Construction of a *umuDC* operon substitution mutation in *Escherichia coli* (281) 221
- Woodrow, J.E., see Kado, N.Y. (271) 253
- Woodrow Setzer, R., see Fuscoe, J.C. (269) 171
- Woodruff, R.C., see Norris, E.S. (269) 63
- Wright, W.E., see Shay, J.W. (277) 163
- Wu, F.-y., Iijima, K., Takiguchi, D., Nishida, A. and Higurashi, M.  
Effect of phototherapy on sister-chromatid exchange in infants with Down syndrome (283) 65
- Wulf, H.C., see Knudsen, L.E. (279) 129
- Wunder, E., see Nikischin, W. (268) 43
- Würgler, F.E., Schlatter, J. and Maier, P.  
The genotoxicity status of sorbic acid, potassium sorbate and sodium sorbate (283) 107
- Würgler, F.E., see Frei, H. (279) 21
- Würgler, F.E., see Lewtas, J. (276) 3
- Xamena, N., see Ribas, G. (278) 43
- Xamena, N., see Torres, C. (280) 291
- Xia, W., see Ma, T.-H. (270) 39
- Xu, J., Wise, J.P. and Patierno, S.R.  
DNA damage induced by carcinogenic lead chromate particles in cultured mammalian cells (280) 129
- Xu, J., see Ma, T.-H. (270) 39
- Xue, K.-X., Ma, G.-J., Wang, S. and Zhou, P.  
The in vivo micronucleus test in human capillary blood lymphocytes: methodological studies and effect of ageing (278) 259
- Yagi, K., see Kasahara, Y. (278) 145
- Yagi, K., see Kasahara, Y. (280) 117
- Yagi, T., Sato, M., Tatsumi-Miyajima, J. and Takebe, H.  
UV-induced base substitution mutations in a shuttle vector plasmid propagated in group C xeroderma pigmentosum cells (273) 213
- Yajima, H., see Yasui, A. (273) 231
- Yamada, H., see Romagna, F. (278) 197
- Yamada, H., see Sasaki, Y.F. (269) 79
- Yamada, M., Sofuni, T. and Nohmi, T.  
Preferential induction of AT-TA transversion, but not deletions, by chlorambucil at the *hisG428* site of *Salmonella typhimurium* TA102 (283) 29
- Yamagata, Z., see Takeshita, T. (275) 21
- Yamaguchi, H., see Akuzawa, S. (266) 63
- Yamamoto, K., see Oya, Y. (266) 281
- Yamamura, E., Hirono, H., Takeuchi, M., Kojima, M. and Aoki, S.  
The micronucleus assay with mouse peripheral blood reticulocytes using acridine orange-coated slides with triethylenemelamine (278) 127
- Yamasaki, E.F., Salamon, D.P. and Wani, A.A.  
Mutational activation of H-ras oncogene transformability by alkylnitrosourea-induced DNA damage (266) 241
- Yamazaki, H., Oda, Y. and Shimada, T.  
Use of a newly developed tester strain *Salmonella typhimurium* NM2009 for the study of metabolic activation of carcinogenic aromatic amines by rat liver microsomal cytochrome P-450 enzymes (272) 183
- Yamazaki, N., see Matsuoka, A. (272) 223
- Yang, A.-L., see Waters, R. (273) 145
- Yang, J., see Zhang, Z. (280) 279
- Yang, L., see Hornsby, P.J. (275) 13
- Yang, W.-L., Klopman, G. and Rosenkranz, H.S.  
Structural basis of the in vivo induction of micronuclei (272) 111
- Yangihara, Y., see Iwamoto, Y. (280) 233
- Yashiki, T., see Matsumoto, K. (268) 59
- Yasui, A., Yajima, H., Kobayashi, T., Eker, A.P.M. and Oikawa, A.  
Mitochondrial DNA repair by photolyase (273) 231
- Yasui, L.S., see Schwartz, J.L. (282) 13
- Yokoizuma, A., Kada, T. and Kuroda, Y.  
An inhibitor of potentially lethal damage (PLD) repair reduces the frequency of  $\gamma$ -ray-induced mutations in cultured Chinese hamster V79 cells (268) 247
- Yoshida, J., see Ohuchida, A. (278) 139
- You, Z., see Sinsheimer, J.E. (268) 255
- Young, W.C., see Montreuil, C.N. (282) 89
- Yu, S., Herreno-Saenz, D., Miller, D.W., Kadlubar, F.F. and Fu, P.P.  
Mutagenicity of nitro-polycyclic aromatic hydrocarbons with the nitro substituent situated at the longest molecular axis (283) 45

- Yuba, S., see Satokata, I. (273) 203
- Yuno, K., see Kasahara, Y. (278) 145
- Zakut, H., Lapidot-Lifson, Y., Beerli, R., Ballin, A. and Soreq, H.  
In vivo gene amplification in non-cancerous cells: cholinesterase genes and oncogenes amplify in thrombocytopenia associated with lupus erythematosus (276) 275
- Zavodny, S.M., see Osburne, M.S. (274) 79
- Zdzienicka, M.Z., Venema, J., Mitchell, D.L., Van Hoffen, A., Van Zeeland, A.A., Vrieling, H., Mullenders, L.H.F., Lohman, P.H.M. and Simons, J.W.I.M.  
(6-4) Photoproducts and not cyclobutane pyrimidine dimers are the main UV-induced mutagenic lesions in Chinese hamster cells (273) 73
- Zdzienicka, M.Z., see Lehmann, A.R. (273) 1
- Zdzienicka, M.Z., see Sakaguchi, K. (274) 11
- Zdzienicka, M.Z., see Vrieling, H. (274) 147
- Zebitz, U., see Knudsen, L.E. (279) 129
- Zeighami, E.A., see Uziel, M. (277) 35
- Zhang, C., see Linnane, A.W. (275) 195
- Zhang, C.-y., see Chen, D.-q. (282) 227
- Zhang, L.-H., see Vrieling, H. (274) 147
- Zhang, R.F., see Chen, C.S. (265) 211
- Zhang, Y. and Sun, K.  
Unscheduled DNA synthesis induced by the antitumor drug vincristine in germ cells of male mice (281) 25
- Zhang, Z. and Yang, J.  
Effects of amino acids on sister-chromatid exchanges (280) 279
- Zhao, J.H., Tohda, H. and Oikawa, A.  
Camptothecin-induced sister-chromatid exchange dependent on the presence of bromodeoxyuridine and the phase of the cell cycle (282) 49
- Zhong, B.-Z., see Gu, Z.-W. (279) 55
- Zhou, P., see Xue, K.-X. (278) 259
- Zhu, W., Keng, P.C. and Chou, W.-G.  
Differential gene expression in wild-type and X-ray-sensitive mutants of Chinese hamster ovary cell lines (274) 237
- Zilfian, V.N., see Nersessian, A.K. (268) 211
- Zili, Z., see Hongyu, Y. (272) 125
- Zimmering, S., Olvera, O., Cruces, M.P., Pimentel, E., Arceo, C., De la Rosa, M.E. and Guzman, J.  
Irradiated cocoa tested in the wing spot assay in *Drosophila melanogaster* (281) 169
- Zimmering, S.  
Sex chromosome loss induced by X-rays in sperm of *Drosophila* (281) 1
- Zimmering, S., see Rodriguez-Arnaiz, R. (180) 75
- Zimmerman, L.J., see Fuscoe, J.C. (269) 171
- Zimmerman, L.J., see Fuscoe, J.C. (283) 13
- Zimmerman, L.J., see Fuscoe, J.C. (283) 255
- Zimmermann, F.K. and Mohr, A.  
Formaldehyde, glyoxal, urethane, methyl carbamate, 2,3-butanedione, 2,3-hexanedione, ethyl acrylate, dibromoacetone nitrile and 2-hydroxypropionitrile induce chromosome loss in *Saccharomyces cerevisiae* (270) 151
- Zimmermann, F.K., see Lewtas, J. (276) 3
- Zordan, M., see Paleologo, M. (281) 11
- Zunt, S., see Dunipace, A.J. (279) 255

THE UNIVERSITY OF CHICAGO  
LIBRARY

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607

1000 S. EAST ASIAN LIBRARY  
CHICAGO, ILL. 60607



## Master Keyword Index to Volumes 265-283

- Absorption, (277) 35
- Abstracts, (271) 115
- Accuracy of DNA replication, (274) 29
- Acetaminophen, double-blind trial, (279) 181
- 2-Acetylaminofluorene, (268) 155, (278) 153
- Acetylaminofluorene, (282) 253
- N-2-Acetylaminofluorene, (265) 283
- Acetylcholine receptor antagonists, (281) 267
- N-Acetylcysteine, (267) 173
- 7-Acetyl-N-hydroxy-2-acetylaminofluorene, (269) 73
- N-Acetyltransferase, (279) 83
- O-Acetyltransferase, (272) 183
- Acridine orange, (278) 83, (278) 109, (278) 121, (278) 131, (278) 169, (278) 175, (278) 181, (278) 187, (278) 205, (278) 209
- Acridine orange-coated slide method, (278) 127
- Acridine orange-coated slides, (278) 193
- Acridine orange staining, (278) 117
- Acridine orange supravital staining, (269) 113, (278) 153, (278) 197
- Acridines, (265) 181, (267) 193
- Acrolein, (283) 131
- Acrylamide, (281) 287, (283) 185
- Active oxygen, (281) 215
- Active oxygen species, (266) 77, (269) 217, (281) 77
- Ada gene, (282) 39
- Ad-3A locus, (267) 105, (269) 149
- Adaptive response, (265) 273, (282) 69, (282) 259, (283) 137, (283) 243
- Ad-3B locus, (267) 105, (269) 149
- Adenovirus DNA, homologous recombination, (274) 201
- Ad-3 region, (267) 105, (269) 149
- Adrenocortical cells, (275) 13
- Adriamycin, (265) 155
- Aflatoxin B<sub>1</sub>, (265) 23, (267) 157, (268) 307, (269) 231, (269) 269, (279) 209
- Aflatoxin B<sub>1</sub> dichloride, (273) 243
- Aflatoxin B<sub>1</sub> epoxide, (273) 145, (273) 243
- Aflatoxin B<sub>1</sub>, Sodium azide, (269) 307
- Ageing, (266) 189, (275) 21, (275) 87, (275) 115, (275) 145, (275) 169, (275) 181, (275) 227, (275) 243, (275) 249, (275) 267, (275) 281, (275) 295, (275) 305, (275) 317, (275) 331, (275) 355, (275) 405
- Ageing theories, (275) 209
- Age response, (267) 257
- Aggregated data, (272) 133
- Aging, (275) 47
- AGT, (265) 45
- Airborne particulate matter, (271) 1
- Airborne particulates, (276) 101
- Airborne pollutants, (280) 253
- Air particles, (276) 11
- Air-particulate extract, urban, (283) 295
- Air pollutants, (271) 89, (281) 203
- Alanine, (268) 191
- Aldehyde, (283) 131
- Alizarin, (265) 263
- Alkaline unwinding, (282) 13
- Alkylating agent, (270) 115, (283) 83
- Alkylating agents, (267) 77, (271) 101, (272) 193, (274) 177
- Alkylating agents, DNA-directed, (265) 181
- Alkylating agents, UV and ionising radiation, (273) 263
- O<sup>6</sup>-Alkyl guanine, (274) 225
- O<sup>6</sup>-Alkylguanine-DNA alkyltransferase, (273) 271, (282) 39, (283) 125
- Allelic loss, (269) 55, (277) 163
- Allium micronucleus assay, (280) 149
- Alzheimer's disease, (275) 57
- α-Amanitin, (274) 57, (274) 93
- Ames assay, (269) 243, (271) 1, (271) 213, (280) 205, (281) 193, (281) 233, (283) 295
- Ames Salmonella mutagen test system, (281) 39
- Ames test, (265) 1, (268) 1, (268) 191, (269) 301, (276) 3, (279) 1, (279) 61, (279) 91, (279) 275, (280) 161, (280) 225
- Amino acids, (280) 279
- 2-Aminoanthracene, (265) 1, (268) 11, (279) 217
- p-Aminobenzoic acid, (282) 119
- 6-Aminochrysene, (279) 153
- N<sup>4</sup>-Aminodeoxycytidine 5'-triphosphate, (268) 59
- 2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline, (268) 307
- 2-Aminofluorene, (282) 135
- 2-Amino-3-methylimidazo[4,5-f]quinoline (IQ), (269) 279, (279) 239
- 5-Aminosalicylic acid, (283) 59
- Aminostilbenes, (268) 255
- Aminothiazole, (281) 233
- Amitrole, (283) 7
- AM1 method, (266) 181
- AMMN, (279) 91
- Ammonium metavanadate, (269) 141
- Amount of S9 in S9 mix, (276) 133
- cAMP, (282) 247
- Amplification, (272) 101
- Amplification, mammalian gene, (276) 199
- Amplification, rates of, (276) 189
- Amsacrine, (268) 35

- Amsacrine, azido analogues, (280) 233  
 Anaesthetic gases, (279) 117  
 Anamu, genotoxicity, (280) 29  
 Aneugenicity evaluation, (282) 159  
 Aneugens, (282) 265  
 Aneuploidogen, (271) 13  
 Aneuploidy, (266) 117, (266) 143, (266) 151, (266) 231, (280) 181, (281) 267, (282) 79, (282) 159, (283) 53  
 Aneuploidy induction, (281) 187  
 Aniline mustard, (265) 181  
 9-Anilinoacridine, azido analogues, (280) 233  
 Animal and human carcinogens, (271) 269  
*o*-Anisidine, (279) 83  
*p*-Anisidine, (279) 83  
*o*-Anisidine, non-genotoxicity, (279) 223, (279) 225  
 Annual Meeting 1991, EEMS, (271) 115  
 Anoxic radiosensitizer, (267) 133  
 Antagonism, (270) 71  
 Anthraquinone, (266) 63  
 Anthraquinones, (265) 263, (279) 1  
 Antiarrhythmic drug, (280) 205  
 Antibody, monoclonal, (273) 253  
 Anticarcinogenesis, (267) 229, (267) 251, (267) 291  
 Anticarcinogenesis in fish, (267) 243  
 Anticlastogen, (269) 251  
 Anticlastogenic effect, (266) 205, (279) 281  
 Anticlastogens, (267) 211  
 Anticonvulsive, (278) 61  
 Antikinetochore, (282) 79  
 Antikinetochore antibody technique, (282) 159  
 Antimutagen, (269) 193  
 Antimutagenesis, (265) 237, (266) 77, (267) 229, (267) 251, (282) 93  
 Antimutagenicity, (265) 149, (267) 173, (267) 183, (267) 201, (269) 201, (282) 147  
 Antimutagenicity profiles, (267) 157  
 Antimutation, (279) 35  
 Antioxidant, (269) 113, (269) 193, (277) 187, (281) 77  
 Antioxidants, (265) 245, (275) 257, (275) 281, (282) 93  
 Anti single-stranded DNA antibody, (274) 19  
 Aphidicolin, (269) 107  
 Apigenin, (270) 87  
 AP-PCR fingerprinting, (283) 263  
*Aprt* gene, (266) 221, (269) 55  
 AP sites, (273) 253  
 Apurinic/aprimidinic sites, (275) 1  
 Aquatic mercury, (280) 149  
 1- $\beta$ -D-Arabinofuranosylcytosine, (278) 131  
 1- $\beta$ -D-Arabinofuranosylcytosine treatment, (266) 273  
 Arachidonic acid, (269) 279  
 Area, (271) 13  
 Arecoline, (278) 271  
 Armenian hamster, (268) 211  
 Aroclor 1254, (278) 197  
 Aromatic amines, (265) 1, (272) 183  
 Arsenic, (283) 91  
 Arsenic trioxide, (270) 65  
 Arsenite, (265) 203  
 Artificial intelligence, (272) 59  
 Aryl hydrocarbon (benzo[*a*]pyrene) hydroxylase, (269) 201  
*N*-Arylhydroxamic acid *N,O*-acyltransferase, (269) 73  
 $\alpha$ -Asarone, (279) 269  
 Asbestos, (265) 245  
 L-Ascorbic acid, (266) 85  
 Aspergillus, (266) 117  
 Asthmatic patients, (280) 271  
 Asynchronous DNA replication, (279) 91  
 Atmospheric mutagens, (281) 67  
 Atom-bomb survivors, (267) 257  
 ATP, (265) 45  
 Automated DNA sequencer, (269) 285  
 Autophagy, (275) 395  
 Average generation time, (283) 173  
 5-Azacytidine, (266) 93, (283) 21  
 5-Aza-2'-deoxycytidine, (276) 189  
 Azo dyes, mutagenicity, (277) 201  
 Azoreductases, (277) 201  
  
*Bacillus subtilis*, (274) 79  
 Bacterial mutagenicity, (268) 199, (276) 3  
 Bacteriophage T7, (281) 81  
 BALB/c-3T3 cell, (279) 217  
 Base change mutations, (281) 261  
 Base DNA excision repair, (273) 29  
 Baseline SCE, (279) 199  
 Base replacement in mammals, (267) 43  
 Beef, cooked, consumption of, (281) 3  
 Benomyl, (283) 113  
 Benzene, (268) 49, (278) 193, (280) 261, (280) 285  
 Benzidine analogues, (268) 255  
 Benzidine moieties, (277) 201  
 Benzo[*a*]pyrene, (268) 21, (268) 155, (269) 185, (276) 87, (278) 165, (279) 217  
 Benzo[ $\alpha$ ]pyrene, (276) 23  
 Benzo[*a*]pyrene diolepoxide, (269) 129, (281) 11  
*p*-Benzoquinone, (269) 217  
 Benzyladenine, (281) 277  
 Betel nut, (278) 271  
 Binuclear cells, (281) 267  
 Bio-antimutagenic effect, (266) 205  
 Bioassay-directed chemical analysis, (281) 67  
 Bioassays, (272) 205  
 Biological dosimetry, (271) 209, (272) 31, (272) 73  
 Biological markers, (271) 69  
 Biological monitoring, (272) 237  
 Biological samples, (272) 205  
 Biologic markers, (278) 237  
 Biomarkers, in urine, (267) 277  
 Biomaterials, (282) 99  
 Biomimetic systems, (269) 243  
 Biomonitoring, (268) 131, (280) 149  
 Biphenyl amines, (268) 255  
 Birth weight, (269) 35  
 Bleaching, (282) 219  
 Bleomycin, (270) 167, (272) 237, (275) 57  
 Blood chemistry parameters, (281) 31  
 Bloom's syndrome, (267) 257  
 Bombesin, (270) 97

- Bone marrow, (271) 223, (281) 99, (283) 173  
 Bone-marrow cells, (278) 253  
 Bone marrow, rat, (283) 179  
 Bovine lymphocytes, mitogenic stimulation, (273) 29  
 Brain, (275) 317  
 Brain neoplasm, (276) 299  
 Branching process, mathematical model, (276) 225  
 Breakage-fusion bridge cycles, (276) 261  
 Breast cancer, (271) 101  
 5-Bromo-2'-deoxyuridine, (275) 97  
 Bromodeoxyuridine, (280) 279, (282) 49  
 5-Bromodeoxyuridine, (283) 87  
 Bromodeoxyuridine density-shift technique, (273) 29  
 Bromodeoxyuridine labeling, (270) 185  
 Brusick scoring system, (266) 7  
 Butylated hydroxytoluene, (277) 187  
*tert*.-Butylhydroquinone, (280) 17  
  
 CAD gene amplification, (265) 9  
 Caffeine, (265) 155, (266) 215, (267) 193, (269) 225, (269) 259, (269) 307, (282) 43  
 Cairo conference, (272) 83  
 Calcium compounds, (267) 291  
*Callithrix jacchus* Chimera, (282) 19  
 Camptothecin, (268) 167, (269) 259, (282) 49  
 Cancer, (275) 21, (275) 227, (276) 329  
 Cancer prevention, (267) 291  
 $\beta$ -Carbolines, (268) 287, (269) 79  
 Carboxylic acids, (279) 75  
 Carboxymethylglucan, (282) 147  
 Carcinogen activation, (269) 243  
 Carcinogenesis, (269) 55, (269) 269, (275) 47, (275) 97  
 Carcinogenicity, (277) 187, (283) 107  
 Carcinogenicity prediction, evaluation, (283) 161  
 Carcinogenic potency, (279) 261  
 Carcinogens, environmental, (280) 175  
 Carcinoma, squamous cell, (271) 69  
 $\beta$ -Carotene, (265) 237, (267) 265, (267) 291, (281) 193  
 Carotenoids, (267) 157  
 CASE, (272) 59, (272) 111  
 CASE/GI, (272) 59  
 CASE methodology, (265) 61  
 Catechins, (267) 201  
 Cattle, (275) 13, (283) 199  
 C-banding, (271) 13  
 C-bandless chromosomes (CM), (276) 285  
 Cell ageing, (275) 209  
 Cell culture, (275) 405  
 Cell cultures, (267) 211  
 Cell cycle, (265) 195, (266) 99, (266) 273, (270) 185, (282) 49  
 Cell cycle, effect of X-irradiation on, (268) 223  
 Cell cycle kinetics, (268) 115, (275) 21, (283) 91  
 Cell cycle progression, (274) 163  
 Cell division delay, (280) 143  
 Cell hybrids, (265) 9  
 Cell killing, (267) 19  
 Cell killing, radiation-induced, (274) 111  
 Cell poration, (268) 27  
 Cell proliferation kinetics, (270) 211  
 Cell proliferation, mitomycin C, (282) 283  
 Cells, cultured, (280) 175  
 Cell transformation, (267) 97, (281) 115, (283) 21  
 Cellular DNA repair, defects in, (273) 97  
 C-erb B<sub>1</sub>, (276) 299  
<sup>252</sup>Cf neutron, (268) 323  
 Chelating agents, (283) 145  
 Chemical analysis, bioassay-directed, (281) 67  
 Chemical carcinogens, (266) 253  
 Chemical composition, (265) 223  
 Chemical-induced chromosome loss, (270) 151  
 Chemical induction of Tn10 precise excision, point mutations, SOS, evaluation, (283) 161  
 Chemical mutagenesis, (270) 3  
 Chemical purity, (281) 233  
 Chemoprevention, (267) 243, (267) 251, (267) 265, (267) 291  
 Chemoprevention of cancer, (279) 35  
 Chemotherapy, (271) 101  
 Chernobyl, (270) 23, (275) 81  
 Chernobyl fallout, (283) 221  
 Chicken, (268) 115  
 Chicks, (272) 175  
 Chinese hamster, (266) 221, (268) 211, (274) 11, (276) 179, (280) 181  
 Chinese hamster cell line, (268) 297  
 Chinese hamster cells, (265) 23, (268) 247, (275) 405, (281) 215, (282) 259  
 Chinese hamster epithelial liver cells, (271) 79  
 Chinese hamster lung (CHL) cell, (272) 223  
 Chinese hamster mutants, (273) 243  
 Chinese hamster ovary, see also CHO  
 Chinese hamster ovary cells, (266) 99, (270) 191, (274) 93, (275) 31, (279) 153, (281) 157  
 Chinese medicinal herbs, (279) 209  
 Chlorambucil, (282) 151, (283) 29, (283) 75  
 Chlorination, (269) 217  
 2-Chlorobenzylidene malonitrile, (282) 231  
 8-Chlorocaffeine, (269) 259  
 Chlorofuranones, (266) 181  
 Chlorophenols, (280) 175  
 Chlorophyllin, (267) 193  
 Chlorpromazine, (265) 155  
 CHO, see also Chinese hamster ovary  
 CHO cell, (265) 203  
 CHO cells, (270) 87, (270) 167, (278) 69, (279) 55, (280) 129, (281) 47, (283) 125  
 CHO, in vitro, (265) 31  
 CHO-K1 cells, (267) 19  
 Cholinesterase genes, (276) 275  
 Chromate, (283) 211  
 Chromatid aberrations, (268) 223, (282) 69  
 Chromatid breaks, (282) 107  
 Chromatid-type aberration, (267) 97  
 Chromatin bodies (CB), (276) 285  
 Chromatin structure, (273) 1  
 Chromium, (278) 69, (280) 129  
 Chromium(III) chloride, (266) 197  
 Chromium(V), (283) 211  
 Chromium(VI) oxide, (266) 197



- Chromosomal aberration, (265) 203, (268) 297, (271) 289, (279) 129
- Chromosomal aberrations, (266) 215, (266) 231, (268) 199, (269) 225, (271) 209, (271) 223, (272) 133, (278) 19, (278) 69, (279) 145, (279) 195, (281) 31, (281) 89, (283) 59, (283) 169, (283) 199, (283) 211, (283) 237
- Chromosomal aberrations, bone-marrow, in vivo, (268) 255
- Chromosomal aberrations in *Vicia faba*, (268) 167, (269) 259
- Chromosomal aberrations of peripheral lymphocytes, (279) 171
- Chromosomal damage, (279) 233
- Chromosomal rearrangements, (268) 265
- Chromosome aberration, (265) 237, (267) 97, (272) 175, (275) 21, (280) 45, (280) 205, (281) 215
- Chromosome-aberration assays, in vitro, (265) 45
- Chromosome aberration evaluation in plants, (280) 161
- Chromosome aberrations, (265) 31, (267) 257, (268) 231, (269) 79, (269) 119, (275) 31, (275) 97, (278) 61, (278) 253, (280) 35, (280) 261, (280) 271, (280) 285, (281) 47, (281) 255, (281) 277, (282) 107, (282) 113, (282) 209
- Chromosome aberration test, (281) 181
- Chromosome abnormalities, (283) 69
- Chromosome alteration, (276) 163
- Chromosome analysis, (283) 221
- Chromosome breakage, (275) 7, (275) 57, (276) 225
- Chromosome damage, (266) 99, (279) 227, (281) 3, (281) 295, (282) 259, (283) 75
- Chromosome integrity, (276) 145
- Chromosome loss, (180) 75
- Chromosome method, (282) 227
- Chromosome radiosensitivity, (282) 197
- Chromosome rearrangements, (265) 9
- Chromosomes, (283) 229
- Chromosome structure, (282) 13
- Cigarette smoke condensate, (268) 139
- Cinnamaldehyde, (277) 173, (282) 55
- Cisplatin sensitivity, (274) 45
- Clastogen, (271) 13
- Clastogenicity, (268) 77, (268) 211, (279) 227, (280) 245, (281) 99, (282) 231, (283) 179
- Clastogenicity evaluation, (282) 159
- Clastogenicity in vitro, (282) 169
- Clastogens, (265) 31, (282) 265
- Clonal lifespan, (275) 41
- Cloning and DNA sequence, (273) 263
- Clonogenicity, (267) 19
- C-mitosis, (270) 97
- Coal tar, (268) 131, (276) 11, (281) 11
- Cobalt, (267) 193
- Cockayne's syndrome, (273) 97
- CoCl<sub>2</sub>, (267) 201
- Cocoa, irradiated, (281) 169
- Coke oven workers, (280) 261
- Colchicine, (278) 187
- Collaborative study, (271) 1, (276) 3, (278) 265
- Colony forming, (265) 45
- Combined mutagenicity, (266) 171
- Comet assay, (273) 137
- Comparing and combining, (266) 27, (266) 43
- Complementarity, (266) 253
- Complementation analysis, (273) 119
- Complex mixtures, (265) 223, (276) 3, (276) 23, (276) 61, (276) 87, (276) 117, (276) 133, (276) 139, (279) 217, (283) 1
- Complex mixtures, chemical and biological studies, (276) 11
- Composite scoring system, (266) 43
- Computational alternatives, determination of mutagenicity, (272) 59
- Co-mutagenesis, (269) 79
- Comutagenicity, (265) 149
- Conditional binomial test, (272) 73
- Conference report, (272) 83, (273) 237, (274) 157
- Congenital defect, (268) 323
- Constant denaturant gel electrophoresis, (269) 41
- Consumption of cooked beef, (281) 3
- Cordycepin, (268) 247
- Co-recessive inheritance, (273) 179
- Coronary atherosclerotic heart disease, (275) 169
- Creatine, (268) 191
- Creatinine, (268) 191
- Cro, (267) 139
- Crossing-over induction, (266) 93
- Crown ethers, (280) 109
- Cryopreservation, (275) 7
- Crystal structure, (266) 281
- Cultivation conditions, (266) 135
- Culture conditions, (282) 213
- Cultured cells, (267) 201, (275) 395
- Cultured mammalian cells, (282) 25
- Cyanazine, (281) 295
- Cyanide, (282) 107
- Cyclobutane pyrimidine dimer, (269) 285, (274) 85
- Cyclopentapyrene, (267) 173
- Cyclophosphamide, (265) 237, (267) 257, (268) 211, (271) 49, (278) 99, (279) 199, (279) 217, (280) 137, (282) 147, (282) 159, (282) 235
- Cystine, (281) 157
- Cytochrome c oxidase, (275) 115
- Cytochrome P-450, (267) 193, (268) 11, (269) 185, (269) 201, (269) 231, (271) 59, (272) 183, (281) 39
- Cytochrome P450 enzymes, (277) 251
- Cytogenetic analysis, (281) 133
- Cytogenetic damage, (265) 155, (280) 1
- Cytogenetic effects, interactive, (283) 179
- Cytogenetic endpoints, (279) 195
- Cytogenetic monitoring, (280) 215, (283) 199
- Cytogenetics, (271) 69, (271) 209, (280) 253
- Cytogenetic techniques, (271) 261
- Cytokinesis block, (268) 27
- Cytokinesis-block method, (280) 137
- Cytology, (280) 1
- Cytoskeleton, (275) 237
- Cytotoxic and mutagenic effects, (274) 65
- Cytotoxicity, (266) 63, (269) 27, (270) 87, (281) 25, (281) 157, (281) 277, (282) 25, (283) 287
- Damage and repair, (273) 1
- D and C Red No. 9, oral administration, (281) 163
- Dangers of biotechnology, (282) 1

- DAPI, (282) 43  
 Data analysis, (270) 39  
 Deafness, (270) 103  
 Delayed reproductive death, (270) 191  
 Deletion, (270) 167, (275) 145, (275) 181, (283) 29  
 Deletion breakpoints, (269) 171  
 Deletion mutations, (269) 1, (283) 255  
 Deletions, (270) 115, (275) 249  
 Deltamethrin, (283) 113  
 Denaturing gradient gel electrophoresis, (269) 41  
 DenV gene, (274) 163  
 Deoxyribonucleotide oxidation, (275) 377  
 Deoxyribose degradation, (266) 63  
 Deoxyribose oxidation, (275) 355  
*Dermocybe sanguinea*, ethanol extract, (269) 27  
 De Sanctis-Cacchione syndrome, (273) 193, (273) 203  
 Desferrioxamine, (275) 31  
 Design and statistical analysis, (271) 39  
 Detection enhancement, (283) 1  
 Diagnosis, (273) 137  
 Diagnostic mutagens, (265) 1  
 3-Diazo-*N*-nitrosobamethan, (268) 105  
*o*-Diazoquinone, (268) 65, (268) 105  
*p*-Diazoquinone, (268) 65, (268) 105  
 Dibenzofuran, (283) 35  
 Dibenzo-*p*-dioxin, (281) 247  
 $\alpha$ -Dicarbonyl compounds, (269) 301  
 Dicentric, (283) 169  
 Dicentric chromosomes, (272) 31, (272) 73  
 3,3'-Dichlorobenzidine, (278) 31  
 Dichloroethylamino 2-nitrobenzofuran derivatives, (280) 9  
*Dictyostelium discoideum*, (274) 187  
 Dieldrin, (270) 65  
 Diesel emission particles, (279) 55  
 Diesel exhausts, (267) 173  
 Diesel particles, (276) 11, (282) 89  
 Diesel particulate matter, (276) 81  
 Diet, (275) 47  
 Dietary carcinogens, (268) 307  
 Diethylnitrosamine, (271) 59, (280) 137  
 Dihydrofolate reductase, (274) 93, (280) 117  
 Dihydrofolate reductase gene, (276) 179  
 DiMeIQx, (268) 191  
 Dimethoate, (283) 113  
 7,12-Dimethylbenz[*a*]anthracene, (265) 283, (271) 59, (278) 169  
 Dimethylbenz[*a*]anthracene, (271) 223  
 Dimethyl mercury, (281) 255  
 Dimethylnitrosamine, (278) 103  
*N,N'*-Dimethylurea, (279) 275  
 2,7-Dinitrodibenzofuran, (283) 35  
 2,8-Dinitrodibenzofuran, (283) 35  
 2,7-Dinitrodibenzo-*p*-dioxin, (281) 247  
 2,8-Dinitrodibenzo-*p*-dioxin, (281) 247  
 Dinitropyrene, (267) 173  
 1,3-Dinitropyrene, (278) 11  
 1,6-Dinitropyrene, (270) 87, (278) 11  
 Dinitropyrene isomers, (279) 289  
 1,4-Dioxane, (280) 245  
 Diphenylhydantoin, (278) 61  
 Dipyrimidine adducts, (274) 123  
 Directed mutagenesis, (277) 139  
 Disease, (275) 257  
 Distributions, (281) 227  
 DMPO spin adduct, (268) 105  
 DNA, (274) 57  
 DNA adduct, (279) 91, (283) 1  
 DNA adducts, (267) 257, (268) 139, (277) 35, (279) 153, (281) 11  
 DNA adducts, large, repair of, (273) 145  
 DNA alkyltransferase, (274) 225  
 DNA amplification, (276) 285, (276) 317, (276) 329  
 DNA base damage, (275) 343  
 DNA binding, (279) 209  
 DNA-binding protein, (273) 85, (274) 211  
 DNA-binding proteins, (273) 49  
 DNA breaks, role of, (267) 1  
 DNA content, (271) 13  
 DNA cross-linking agents, (274) 11  
 DNA crosslinks, (274) 1  
 DNA damage, (266) 241, (267) 1, (267) 183, (269) 269, (270) 177, (271) 101, (274) 65, (274) 187, (275) 1, (275) 305, (275) 317, (275) 331, (275) 355, (275) 367, (280) 129, (281) 105, (282) 25, (282) 99  
 mtDNA damage, (275) 169  
 DNA damage, oxidative, (273) 253  
 DNA damage, radiation-induced, (271) 243  
 DNA damage, rate of, (267) 277  
 DNA damages, (283) 263  
 DNA damage, spontaneous, origins of, (277) 139  
 DNA deamination, (281) 193  
 DNA degradation, (275) 69  
 DNA demethylation, (276) 189  
 DNA-directed alkylating agents, (265) 181  
 DNA double-strand break repair, (274) 237  
 DNA double-strand breaks, (268) 27  
 DNA double-strand breaks, formation, (266) 163  
 DNA double-strand breaks, repair of, (274) 111  
 DNA endonuclease, (273) 57  
 DNA endonucleases, (273) 157  
 DNA excision repair, (266) 205, (267) 277, (268) 287, (274) 93  
 cDNA expression vectors, (281) 39  
 DNA intercalating agents, (265) 103  
 DNA ligase, (281) 81  
 DNA modifications, (275) 47  
 DNA polymerase, (269) 285  
 DNA polymerase  $\alpha$ , (274) 29  
 DNA polymerase I, (268) 59  
 DNA polymorphism, (273) 193  
 DNA,  $^{32}$ P-postlabelling analysis, (282) 139  
 DNA-protein crosslinks, (269) 141, (275) 331, (283) 131  
 DNA reactivity, (282) 241  
 DNA rearrangements, (276) 261  
 DNA repair, (267) 67, (270) 145, (273) 49, (273) 85, (273) 119, (273) 179, (273) 193, (273) 203, (273) 243, (273) 253, (273) 263, (274) 103, (274) 187, (275) 305, (275) 317, (281) 17, (282) 107, (282) 247  
 DNA-repair deficiency, (267) 31

- DNA-repair genes, (274) 157  
 DNA repair host-mediated assay, (272) 161  
 DNA repair inhibition, (271) 289  
 DNA repair, in vitro, (271) 201  
 DNA-repair mechanisms, (273) 237; (274) 157  
 DNA repair test in vitro, (272) 145  
 DNA repair, workshop, (273) 1  
 DNA replication arrest, (274) 225  
 DNA sequence, (282) 183, (283) 13  
 DNA sequences with coding properties, (276) 145  
 DNA sequencing, (269) 171  
 DNA single-strand breaks, (273) 243  
 DNA single-strand scission, (281) 55  
 DNA strand breakage, (268) 105  
 DNA strand breaks, (269) 269, (282) 13  
 DNA-strand breaks, H<sub>2</sub>O<sub>2</sub>-mediated, (265) 255  
 DNA topoisomerase I, (268) 167, (269) 259  
 cDNA transfection, (265) 23  
 DNA, UV-irradiated, (273) 49  
 Dog P-450IA1, (269) 97  
 Dominant lethal assay, (282) 127  
 Dominant lethal mutations, (278) 47, (283) 185  
 Dominant lethal mutation test, (266) 291  
 Dominant lethals, (283) 263  
 Dose-effect relationship, (268) 43  
 Dose information, (266) 27  
 Dose-ranging, (271) 97  
 Dose-response, (267) 243  
 Dose-setting, (271) 97  
 Double minutes (DM), (276) 285  
 Down syndrome, (275) 21, (275) 281, (283) 65  
 Drinking water, (269) 217, (279) 227  
 Drosophila, (180) 75, (266) 197, (267) 221  
 Drosophila, (271) 59, (272) 73, (273) 85, (275) 267, (278) 23  
 Drosophila male germ cells, (266) 93  
*Drosophila melanogaster*, (268) 95, (268) 183, (268) 265, (274) 73, (274) 85, (278) 43, (279) 21, (279) 281, (280) 291, (281) 169  
*Drosophila melanogaster* assays, (280) 161  
 Drosophila sex-linked recessive lethal test, (279) 15  
*Drosophila simulans*, (268) 155, (269) 185  
 Drosophila wing mosaic test, (279) 15  
 Drug metabolizing enzymes, (277) 251  
 Drug resistance genes, (276) 199  
 Duct epithelium, (272) 139  
 Durmet, (279) 15  
 Dursban, (279) 165  
 Dysfertility, (278) 19  
  
 EBV/SV40 shuttle vector, (272) 101  
*E. coli*, (282) 183  
*E. coli* gene *ada*, (273) 271  
*E. coli* K-12, (272) 145, (272) 161  
*E. coli*, see also *Escherichia coli*  
 Effect of ageing, (278) 259  
 Effect of pH, (279) 75  
 EGFR gene, (276) 299  
 Electric and magnetic fields, (282) 25  
 Electron density, (280) 55  
 Electronic and steric effects, (269) 9  
 Electrophilicity, decreased, (282) 241  
 ELF, (282) 25  
 ELISA, (274) 19  
 Ellagic acid, (270) 87  
 Embryo manipulation, (273) 237  
 Embryonic B and T lymphocytes, (268) 115  
 Emodin, (269) 27  
 Endogenous oxidative processes, (267) 277  
 Endonuclease sensitive sites, (273) 281  
 Endoperoxides, (275) 367  
 Endoreduplication, (265) 31  
 Environmental complex mixture, (276) 93  
 Environmental mixtures, (276) 3  
 Enzyme-linked immunosorbent assay, (281) 11  
 EPA guidelines, (272) 79  
 Epidemiology, (277) 35  
 Epidermal growth factor receptor gene, (276) 299  
 Epilepsy, (280) 143, (283) 233  
 Epoxide, (271) 213, (278) 289  
 Erythrocyte-mediated metabolic activation, (282) 135  
*Escherichia coli*, (267) 139, (270) 135, (281) 63, (281) 123, (281) 137, (281) 157, (281) 221, (282) 203  
*Escherichia coli* K-12, (280) 93  
*Escherichia coli*, plasmid-based, mutational system, (270) 219  
*Escherichia coli*, see also *E. coli*  
 Esterase-mediated metabolic activation, (279) 75  
 Ethanol, (268) 95  
 Ethanol exposure, (280) 285  
 Ethanol feeding, (279) 289  
 Ethanol ingestion, chronic, (279) 289  
 Ethanol mutagenicity, (278) 47  
 Ether anaesthesia, (274) 73  
 Ethylating agents, (271) 29  
 Ethyl carbamate, (278) 205  
 Ethylene dibromide, (271) 253, (282) 127  
 Ethylene oxide, (278) 237  
 Ethylene oxide exposure, (281) 31  
 Ethyl methanesulphonate, (266) 85, (266) 171, (268) 231, (270) 177, (278) 109, (283) 243  
 Ethylnitrosourea, (266) 241, (271) 59  
*N*-Ethyl-*N*-nitrosourea, (278) 113  
 EuLISA, (274) 19  
 European Environmental Mutagen Society, (271) 115  
 Excision repair, (273) 43, (273) 281, (274) 57, (274) 123, (274) 211  
 Excision repair of DNA, (267) 277  
 Exfoliated cells, (267) 265  
 Experimental conditions, (277) 139  
 Expression in yeast, (269) 97  
 External abnormality, (268) 323  
 Extraction of solid samples, (276) 11  
 Extraction solvent, (276) 117  
 Extrahepatic tissues, (268) 11  
 Extraocular muscles, (275) 115  
  
 Facial eczema, (268) 199  
 Fanconi anaemia, (273) 57, (274) 11  
 Farmorubicin, (268) 77



- Fecapentaenes, (281) 93  
 Fenton reaction, (275) 355  
 Fermented milk, (267) 193  
 Fibroblasts, (273) 127, (275) 7  
 Fission neutrons, (272) 237  
 Flavonoids, (269) 201, (282) 93  
 Flavouring compounds, (267) 201  
 Flow cytometry, (272) 17, (274) 163  
 Flow karyotyping, (265) 9  
 Fluorescence analysis of DNA unwinding, (281) 17  
 Fluorescence in situ hybridization, (276) 241  
 Fluorescent in situ hybridisation, (276) 261  
 Fluorescent labeling, (275) 343  
 Fluorinated quinolones, (281) 207  
 5-Fluorodeoxyuridine, (268) 167  
 5-Fluorouracil, (278) 139  
 Folic acid, (282) 213  
 Folic acid deficiency, (267) 257  
 Food conservation, (283) 107  
 Food irradiation, (280) 187  
 Food mutagens, (268) 191  
 Food, mutagens in, (269) 279  
 Foreign gene expression, (281) 115  
 Formaldehyde, (280) 1, (283) 131  
 Forward mutation, (269) 141  
*Fpg* gene, (273) 263  
 Fractionation, (267) 229  
 Fragile sites, (282) 43  
 Frameshift, (274) 135  
 Frameshift mutagenicity, (268) 35  
 Frameshifts, (281) 81  
 Free radical, (272) 125  
 Free radicals, (274) 103, (275) 145, (275) 217, (275) 295, (281) 193  
 Free-radical scavengers, (283) 145  
 Free radicals DNA topoisomerase II, (267) 1  
 Free radical theory of ageing, (275) 257  
 Furfural, (180) 75  
  
 G<sub>2</sub>, (266) 99  
 Gamma-irradiation, (267) 19, (269) 225  
 Gamma-radiation, (282) 203  
 Gamma-ray-induced mutation, (269) 55  
 Gamma-ray mutagenesis, (269) 251  
 Gamma-ray repair, (281) 123  
 Gamma-rays, (268) 247, (274) 73, (283) 263  
 Gardona, (279) 165  
 Gasoline exposure, (280) 285  
 G<sub>2</sub> delay, (274) 111  
 Gel shift assay, (273) 85  
 Gender, (275) 57  
 Gene amplification, (269) 319, (276) 145, (276) 151, (276) 163, (276) 225, (276) 241, (276) 261, (276) 299  
 Gene conversion, (280) 17  
 Gene expression in xrs mutants, (274) 237  
 Gene instability, (275) 209  
 Gene mutation, (265) 195, (283) 75  
 Gene mutations, (282) 99  
 Gene mutations in spermatogonia, (283) 185  
 Gene/point mutations, (267) 105, (269) 149  
 Gene replacement, (281) 221  
 Genetic activity profile, listings and plots, (267) 157  
 Genetic bioassays, (277) 91  
 Genetic counselling, (278) 19  
 Genetic damage, (268) 183  
 Genetic information transfer, (277) 251  
 Genetic risk, (281) 133  
 Genetic toxicology studies, in vivo, (271) 97  
 Gene-Tox, (279) 261  
 Gene transfer, (273) 271  
 Genital warts, (266) 231  
 Genome instability, (282) 197  
 Genome mutation, (275) 217  
 Genomic mutations, (282) 99  
 Genomic rearrangements, induction of, (266) 163  
 Genotoxic agents, (281) 17  
 Genotoxic chemicals, (277) 35, (281) 63  
 Genotoxic exposure, (280) 285  
 Genotoxicity, (265) 61, (265) 223, (266) 43, (266) 197, (269) 27, (270) 71, (272) 91, (277) 1, (277) 221, (278) 1, (278) 265, (279) 129, (280) 67, (283) 107  
 Genotoxicity data, (277) 173  
 Genotoxicity review, (277) 187  
 Germ cell development, (281) 25  
 Germ cells, (280) 181, (282) 127  
 Germ-cell stages, (282) 151  
 Germinal mutation, (278) 43  
 Germinal mutation frequency, (277) 239  
 Glass needle microinjection, (281) 115  
 Glioma, (276) 299  
 Glucose, (268) 191  
 Glu-P-1, (278) 277  
 Glutaraldehyde, (283) 131  
 Glutathione, (282) 93, (282) 119  
 Glycophorin-A, (267) 257  
 P-Glycoprotein, (276) 151  
 Glycosides, (265) 263  
*Glycyrrhiza glabra*, (282) 93  
 Glyoxal derivatives, (269) 301  
*Gpt* gene, (267) 77  
 Granuloma pouch, (266) 105  
 Griseofulvin, (266) 143, (266) 151  
 Growth inhibition of calluses and cells, (273) 271  
 Gudakhu, (280) 45  
 Guinea pig, (268) 211  
  
 Haemoglobin, (267) 257  
 Hair follicle, human, (271) 201  
 Haloalkanes, (266) 117  
 Halogenated biphenyls, (281) 151  
 Hamster pancreas duct cells, (272) 139  
 Hazardous wastes, (277) 91  
 Health lamp, (282) 183  
 Heart cells, (275) 395  
 Heat shock, (275) 267  
 Heavy ion radiation, (269) 237  
 Heavy metals, toxicity, (283) 287

- Heliotropium curassavicum*, (279) 245  
 Hemopoietic development, (276) 275  
 Hepatocyte DNA-repair assay, (272) 9  
 Hepatocytes, (282) 169, (282) 253  
 Herbicides, (279) 9, (280) 291  
 Herpes simplex virus type 1, (267) 125  
 Heterocyclic amines, (268) 287, (269) 79, (279) 61, (280) 103  
 Heterokaryon 12, (267) 105, (269) 149  
 Heteroploid human cells, (283) 215  
 Heterozygous effects, (267) 105, (269) 149  
 HGPRT mutation assay, (265) 283, (268) 49, (283) 211  
 Higher plants, (267) 229  
 L-Histidine, (266) 281  
 Histidine-peroxide adduct, (266) 281  
 Historical control test, (272) 73  
 Historical material, (282) 1  
 HLA, (266) 189  
 HLA-A locus mutation, (272) 17  
 Hoechst/ethidium bromide flow cytometry, (270) 185  
 Homogeneously staining regions (HSR), (276) 285  
 Homologous alleles, (267) 89  
*Hordeum vulgare*, (272) 125, (280) 279  
 Horses, (283) 199  
 Host-mediated assay, (280) 93  
 HPLC/ECD, (275) 377  
 Hprt, (266) 105, (269) 129, (270), 191, (272) 195  
 Hprt gene, (269) 171, (283) 13, (283) 255  
 Hprt mutant frequency, (273) 171  
 HPRT mutants, (266) 105, (271) 231  
 Hprt mutation, (265) 283, (269) 1, (274) 147  
 H-ras oncogene, (266) 241  
 Human, (281) 129  
 Human ageing, (275) 195  
 Human cancer, genetic lesions in, (270) 201  
 Human carcinogens, (281) 239  
 Human cells, (272) 101, (276) 241, (278) 69  
 Human chromosomes, (282) 61  
 Human cytogenetic monitoring, (271) 289  
 Human DNA Repair, (275) 87  
 Human EUE cells, (279) 109  
 Human fibroblasts, (281) 115  
 Human genetic monitoring, (265) 165  
 Human genome, (276) 329  
 Human lymphocyte, (268) 297, (278) 259  
 Human lymphocyte metaphase, (282) 227  
 Human lymphocyte proliferation, (283) 91  
 Human lymphocytes, (268) 217, (270) 177, (270) 211, (273) 137, (275) 21, (279) 75, (280) 215, (281) 47, (281) 181, (281) 227, (281) 255, (282) 135, (283) 137, (283) 221, (282) 283  
 Human metallothionein II-A gene, (274) 177  
 Human monitoring, (281) 31  
 Human mtDNA cycle, (275) 195  
 Human muscle, (275) 125  
 Human neuroblastoma, (276) 291  
 Human peripheral blood, (283) 87  
 Human peripheral blood lymphocytes, (280) 279, (281) 17  
 Human tissue, (275) 157  
 Human tumors, (277) 163  
 Hungary, (270) 103  
 Hybrid dysgenesis, (268) 265  
 Hycanthone methanesulphonate, (283) 249  
 Hydrazines, (278) 215  
 Hydrogen peroxide, (265) 255, (266) 77, (266) 281, (268) 231, (275) 405, (281) 77, (281) 157  
 Hydroquinone, (269) 217  
 N-Hydroxy-2-acetylaminofluorene, (269) 73  
 1-Hydroxyanthraquinone, (265) 263  
 p-Hydroxybenzoic acid, (282) 119  
 8-Hydroxydeoxyguanosine, (266) 63, (267) 277  
 8-Hydroxyguanine, (275) 243  
 Hydroxyl radical, (275) 331  
 Hydroxyl radicals, (279) 205  
 8-(p-Hydroxyphenyl)-2'-deoxyadenosine, (268) 65  
 8-(o-Hydroxyphenyl)-2'-deoxyguanosine, (268) 65  
 8-(p-Hydroxyphenyl)-2'-deoxyguanosine, (268) 65  
 8-(p-Hydroxyphenyl)-guanosine, (268) 65  
 Hydroxyphenyl radical, (268) 105  
 1-Hydroxypyrene, (268) 131  
 Hydroxytoluene, butylated, (278) 31  
 Hydroxyurea, (268) 167  
 Hyperdiploidy, (281) 255  
 Hyperoxia, (275) 31, (275) 405  
 Hypochlorous acid, (265) 255  
 Hypoxanthine-guanine phosphoribosyltransferase gene, (265) 283  
 Hypoxanthine-guanine phosphoribosyl transferase (*hprt*) mutation, (268) 49, (283) 211  
 Hypoxanthine phosphoribosyltransferase, (269) 41  
 I-compounds, (275) 47  
 I elements, (268) 265  
 Image analysis, (270) 39  
 Immunogenetics, (270) 125  
 Incision step of DNA excision repair, (269) 79  
 Incubation system, (276) 139  
 Indian muntjac, homologous chromosomes, (283) 193  
 Indigo, (282) 219  
 Indole-3-carbinol, (270) 87  
 Indolo[3,2-c]quinoline-1,4-dione, (280) 225  
 Induced genetic damage, (267) 31  
 Induction, (268) 11, (281) 63  
 Induction of micronucleated reticulocytes, (271) 29  
 Industrial effluents, (277) 91  
 Industrial wastes, (277) 91  
 Inhalation, (280) 35  
 Inhalation exposure, (268) 49  
 Inheritance, co-recessive, (273) 179  
 Inhibition of anticarcinogenesis and antimutagenesis, (267) 251  
 Inhibitors, (283) 145  
 Initial testing battery, (272) 79  
 Inorganic agents, (281) 239  
 Insecticide, (279) 15  
 Insertion elements, (270) 219  
 Insertion mutation, (269) 171  
 Insertions, (275) 227

- In situ hybridization, (268) 265  
 Intelligence, artificial, (272) 59  
 Interaction, (267) 173  
 Intercalation, (268) 35  
 Interception, (282) 93  
 Interlaboratory comparison, (271) 261  
 Interlaboratory study, (276) 61  
 Interlaboratory variability, (276) 3  
 Interlaboratory variation, (276) 33  
 Interstrand cross-links, (273) 157  
 Intralaboratory variation, (276) 33  
 In vitro chromosomal aberration, (272) 223  
 In vitro growth, (283) 287  
 In vitro micronucleus test, (272) 223  
 In vivo, (271) 39  
 In vivo gene amplification, (276) 275  
 In vivo micronucleus test, (278) 259  
 In vivo mutation assay, (268) 307  
 In vivo system, (283) 243  
 In vivo tests, (278) 253  
 Ionizing radiation, (270) 3, (274) 19, (281) 261, (283) 137, (283) 169  
 Ionophores, (280) 109  
 IPCS collaborative study, results, (276) 23  
 IPCS collaborative trial, (276) 33  
 IQ, (269) 97, (269) 279, (278) 277  
 Irradiated cocoa, (281) 169  
 Irradiation, (282) 107  
 Irreparable *ad-3* mutations, (267) 105, (269) 149  
 Irs cells, (274) 111  
 IS elements, (267) 139  
 Isobutene, (271) 213  
 Isocyanates, (283) 97  
  
 Japanese medaka, (283) 263  
 Jeans, (282) 219  
  
 Karyotypic evolution, (276) 163  
 $\text{KBrO}_3$ , (278) 181  
 $\text{K}_2\text{CrO}_4$ , (278) 181  
 Khellin, (279) 103  
 Kinetics, (265) 31  
 Kinetochore, (281) 287  
 Kinetochores, (283) 21, (283) 53  
*Klebsiella pneumoniae*, (282) 73  
 pKM101, (281) 207  
 pKM101 plasmid, (270) 145  
 Korean population, (268) 239  
  
*Lac I* gene, (267) 77, (269) 285  
 $\lambda\text{gt}10$ , (281) 221  
 LD values, (281) 169  
 Lead, (281) 89  
 Lead chromate, (278) 69, (280) 129  
 Lead tetra-acetate, (270) 65  
 LET, (267) 133  
 Lethal mutations, (267) 19  
  
 Letter to the editor, (272) 193  
 Leucocytes, mononuclear, human, (265) 255  
 Leukopenia, (280) 261  
 Lewis rats, (271) 231  
 Life span, (275) 305  
 Ligase chain reaction, (283) 119  
 Lindane, (272) 175  
 Linear regression analysis, (271) 269  
 Lipid peroxidation, (275) 243, (275) 281  
 Lipofuscin, (275) 395  
 Liver, (268) 11  
 Liver UDS assay, (281) 163  
 L1210 leukemia cell cytotoxicity, (280) 225  
*L-myc* proto-oncogene, (276) 307  
 Local sequence dependence, (267) 43  
 Logarithmic phase, (282) 235  
 Log *P*, (280) 55  
 Low pH, (268) 297  
 Low temperature, (268) 183  
 Lucidin, (265) 263  
 LUMO energy, (282) 241  
 Lung fibroblasts, (272) 195  
 Luteoskyrin, (266) 63  
 Lymphoblastoid cell line, (267) 89  
 Lymphoblasts, human, (269) 73  
 Lymphocyte culture, (281) 173, (282) 19  
 Lymphocytes, (266) 189, (268) 49, (271) 209, (271) 289, (272) 17, (283) 87  
 T-Lymphocytes, (271) 231  
 Lymphocytes, human, (265) 273, (274) 103, (281) 227  
 T-Lymphocytes, human, (283) 13  
 Lymphocytes, human blood, (271) 243  
 Lymphocytes, human, exposed in vitro, (281) 295  
 Lysine, (280) 279  
 Lysosomes, (275) 395  
  
 Macrofluctuation test, (268) 131  
 Madder, (265) 263  
 Magnetic fields, (283) 279  
 Malathion, (280) 187  
 Maleic hydrazide, (282) 69  
 Malformations, (283) 263  
 Mammalian ageing, (275) 217  
 Mammalian cell lines, (278) 11  
 Mammalian cells, (266) 85, (266) 171, (267) 201, (268) 231, (274) 225, (279) 121  
 Mammalian gene amplification, (276) 199  
 Mammalian germ cells, (266) 143, (266) 151  
 Mammalian mutagenesis, in vitro, assays, (270) 201  
 Maximum tolerated dose, (282) 241  
 Measurement of DNA lesions, (275) 343  
 Mechanism, mutation, (283) 13  
*mei-9<sup>a</sup>*, (180) 75  
 Meiotic cells, (283) 243  
 Meiotic II metaphase, (280) 181  
 MeIQ, (269) 97, (278) 277  
 MeIQx, (268) 191  
 Melphalan, (282) 151



- Membrane damage, (275) 217  
 6-Mercaptopurine, (278) 139  
 Metabolic activation, (265) 1, (269) 269, (271) 59, (272) 183, (279) 217, (280) 93, (283) 7  
 Metabolism, (265) 263, (277) 35  
 Metallothionein, (274) 177  
 Metaphase chromosome analysis, (268) 27  
 Metaphase finder, (272) 31  
 Methodological studies, (278) 259  
 Methotrexate, (278) 145, (280) 117  
 Methotrexate resistance, (276) 179  
 Methylamine hydrochloride, (279) 275  
 Methylation, (275) 13  
 Methylcarbamoylation of DNA, (283) 97  
 O<sup>6</sup>-Methylguanine, (275) 1  
 Methyl isocyanate, (283) 97  
 Methyl mercury chloride, (281) 255  
 Methyl methanesulphonate, (266) 171, (272) 215, (275) 57, (278) 117, (279) 281, (282) 79, (282) 235  
 Methylnitrosourea, (266) 241  
 N-Methyl-N'-nitro-N-nitrosoguanidine, (265) 283, (269) 307, (272) 101, (275) 41, (281) 215  
 N-Methyl-N-nitrosourea, (269) 307  
 Methyl parathion, (280) 169  
 2-Methylpropene, (271) 213  
 Metolachlor, (281) 295  
 Mice, (268) 49, (280) 35, (282) 3  
*Micrococcus luteus*, (273) 43  
 Microinjection, (274) 211  
 Micronucleated reticulocyte induction, (272) 193  
 Micronuclei, (267) 257, (268) 199, (269) 119, (271) 13, (271) 49, (278) 11, (278) 61, (278) 175, (279) 9, (279) 205, (280) 1, (280) 35, (280) 87, (280) 187, (281) 99, (283) 21  
 Micronuclei, in vivo induction, structural basis, (272) 111  
 Micronucleus, (267) 265, (269) 113, (270) 31, (270) 71, (272) 175, (278) 83, (278) 131, (278) 169, (278) 187, (278) 205, (278) 209, (280) 137, (280) 205, (281) 287, (283) 53, (283) 59  
 Micronucleus assay, (268) 27, (279) 55, (279) 217, (281) 187, (282) 159  
 Micronucleus induction, (268) 21, (281) 3, (283) 249  
 Micronucleus, in vitro, (282) 79  
 Micronucleus size, (282) 265  
 Micronucleus test, (271) 29, (278) 99, (278) 103, (278) 109, (278) 113, (278) 117, (278) 127, (278) 139, (278) 145, (278) 159, (278) 165, (278) 181, (278) 193, (278) 197, (280) 45, (280) 117, (281) 163, (281) 181, (282) 147, (282) 191  
 Micronucleus tests, (271) 69  
 Microscreen assay, (267) 1  
 Microsomal activation, (279) 245  
 Microsomal inducer, (276) 139  
 Microsuspension, (271) 253  
 Microsuspension assay, (276) 81, (276) 87  
 Microwave radiation, (281) 181  
 Microwaves, (282) 265  
 Minute mutations, (283) 271  
 Mitochondria, (275) 243, (275) 395  
 Mitochondrial ageing, (275) 209  
 Mitochondrial compartment, (275) 237  
 Mitochondrial DNA, (273) 231, (275) 145, (275) 157, (275) 181, (275) 209, (275) 217, (275) 243, (275) 249  
 Mitochondrial DNA deletion, (275) 157  
 Mitochondrial DNA mutations, (275) 195  
 Mitochondrial function, (275) 133  
 Mitochondrial genetics, (275) 209  
 Mitochondrial mutation, (275) 209  
 Mitochondrial pro-oxidant generation, (275) 295  
 Mitochondrial segregation, (275) 237  
 Mitomycin C, (266) 93, (266) 205, (268) 77, (269) 119, (270) 177, (278) 175, (278) 197, (279) 281, (280) 137, (282) 283, (283) 237  
 Mitosis, (281) 267  
 C-Mitosis, (270) 97  
 Mitotic activity, (268) 115  
 Mitotic delay, (268) 223  
 Mitotic gene conversion, (282) 55, (282) 235  
 Mitotic index, (265) 45, (280) 87  
 Mitotic recombination, (266) 197, (267) 221, (274) 1, (283) 279  
 Mitoxantrone (CAS No. 65271-80-9), (279) 21  
 Mitoxantrone dihydrochloride (CAS No. 70476-82-3), (279) 21  
 Mobile mitochondrial DNA, (275) 227  
 Model systems, (268) 191  
 Modification by thiols, (282) 203  
 Modified DNA bases, (275) 331  
 Modified metabolism, (282) 177  
 Modulation, (267) 183, (269) 307  
 Modulation of mutagenicity, (267) 221, (279) 289  
 Moldy foods, (279) 35  
 Molecular dissection, (276) 199  
 Molecular oncology, (276) 329  
 Monkey cytochrome P-450IA1, (265) 23  
 Monoclonal antibody, (273) 253  
 Monocrotophos, (278) 23  
 Mouse, (266) 291, (268) 211, (271) 223, (278) 139, (278) 253, (282) 107, (282) 159  
 Mouse bone marrow, (269) 119  
 Mouse spermatocytes, (281) 283  
 Mouse spleen cell culture, (279) 165  
 Mouse splenocyte assay, (272) 237  
 MTD, (282) 241  
 MucAB protein, (270) 145  
 MULTICASE, (272) 59  
 Multidrug resistance, (276) 151  
 Multilocus deletion mutations, (267) 105, (269) 149  
 Multiple  $\gamma$ -ray fractions, (282) 259  
 Multiple-locus mutations, (267) 105, (269) 149  
 Multiple regression, (267) 173  
 Multiple treatment, (280) 117  
 Multiplex PCR, (269) 171  
 Multi-stage carcinogenesis, (277) 163  
 Multivariate statistics, (267) 77  
 Murine fibroblasts, *denV*-transfected, (274) 163  
 Mustard reactivity, (265) 181  
 Mutagen, (275) 41  
 Mutagen encapsulated in liposomes, (283) 215  
 Mutagenesis, (266) 241, (268) 1, (268) 11, (272) 101, (274) 135, (279) 1, (279) 121, (279) 245, (281) 207, (281) 261

- Mutagenic activation, (269) 97  
 Mutagenic activity, (278) 215  
 Mutagenicity, (265) 263, (266) 85, (267) 125, (268) 77, (269) 307, (271) 213, (275) 377, (276) 117, (277) 221, (278) 227, (278) 277, (279) 275, (280) 81, (280) 93, (281) 93, (281) 143, (281) 151, (281) 277  
 Mutagenicity assays, (281) 203  
 Mutagenicity increase, (282) 73  
 Mutagenicity testing, (279) 21, (283) 119  
 Mutagenicity tests, (271) 69, (272) 205, (280) 175  
 Mutagenic treatment of T lymphocytes, (268) 43  
 Mutagens, (271) 89, (278) 19  
 Mutant frequency, age effect, (265) 165  
 Mutants content, (266) 135  
 Mutation, (279) 35  
 Mutational hotspot, (270) 115  
 Mutational specificity, (268) 83  
 Mutational spectra, (267) 77  
 Mutational spectrum, (269) 129  
 Mutation at the HGPRT locus, (265) 23  
 Mutation detection, (269) 41  
 Mutation enhancing effect, (268) 287  
 Mutation hotspot, (266) 221, (282) 283  
 Mutation induction, (267) 133, (269) 237, (274) 147, (279) 153, (283) 83  
 Mutation induction by UV, (279) 49  
 Mutation rate, (266) 135  
 Mutations, (275) 249  
 Mutation spectra, (269) 1  
 Mutator, (270) 191  
 Myeloperoxidase inhibitor, (265) 255
- Nalidixic acid, (282) 203  
 Nasal mucosa, (280) 1  
 Natural foods, (279) 35  
 Natural plants, (279) 245  
 Neurodegeneration, (275) 133  
 Neurofibromatosis, (283) 237  
 Neurological abnormalities, (273) 97  
 Neurones, (275) 317  
 Newt micronucleus test, (283) 157  
 Nickel exposure, (279) 171  
 Nickel in urine, serum and hair, (279) 171  
*Nicotiana tabacum* var. *Xanthi*, (273) 271  
 Niridazole, (280) 93  
 Nitrated polycyclic aromatic hydrocarbons, (265) 61  
 Nitric oxide, (281) 193  
 Nitrite, (278) 277  
 Nitrite scavenger, (282) 119  
 Nitroarenes, (271) 89, (272) 91  
 Nitrobenzo[*a*]pyrenes, (280) 81  
 4-Nitrobiphenyl, (271) 253  
 6-Nitrochrysene, (279) 153  
 Nitro compounds, (283) 1  
 1-Nitrodibenzofuran, (283) 35  
 2-Nitrodibenzofuran, (283) 35  
 3-Nitrodibenzofuran, (283) 35  
 4-Nitrodibenzofuran, (283) 35
- 2-Nitrodibenzo-*p*-dioxin, (281) 247  
 2-Nitrofluorene, (279) 217  
 Nitrofluorenes, (281) 67  
 Nitrofurans, (280) 67  
 Nitrogen dioxide, (281) 193  
 Nitrogen fertiliser industry, (281) 133  
 Nitrogen oxides, (283) 35  
 Nitro-PAHs, (283) 45  
 Nitrophenanthrene lactones, (281) 67  
 Nitro-polycyclic aromatic hydrocarbons, (283) 45  
 1-Nitropyrene, (270) 87, (276) 23, (276) 87  
 4-Nitroquinoline-*N*-oxide, (275) 41  
 4-Nitroquinoline-1-oxide, (270) 177, (273) 145  
 Nitroreductase, (272) 91  
 Nitroreduction, (280) 93  
 Nitrosamine, (272) 139  
 Nitrosation, (269) 217  
*N*-Nitroso-2-acetylaminofluorene, (265) 203  
 Nitroso compounds, (283) 1  
*N*-Nitrosopyrrolidine, (271) 59  
 Nitrotoluene, (282) 73  
*N-myc* amplification, (276) 291  
 NNK, (279) 91  
 NNKOAc, (279) 91  
 Nondisjunction, (268) 95  
 Nongenotoxic carcinogens, (266) 253  
 Normal human population, (283) 69  
 Normalization, (271) 1, (276) 61  
 Normochromatic erythrocytes, (280) 87  
 Novobiocin, (268) 217  
 Nuclear matrix, (282) 13  
 Nuclear power plant, (283) 169  
 Nuclear protein, (281) 105  
 Nuclease, (274) 11  
 Nuclease P1 enhancement, (282) 139  
 Nucleic acids, (265) 155  
 Nucleoside, (267) 125  
 Nucleoside analog, (268) 59  
 Nucleoside hydroperoxide, (283) 145  
 Nucleosomal DNA, (273) 157  
 Nucleotide excision repair, (273) 29  
 Nutrition, (275) 47
- Occupation, (278) 19  
 Occupational clastogens, (280) 215  
 Occupational exposure, (279) 195, (282) 209  
 Oestradiol treatment, (282) 3  
*N*-OH-2-MeO-AAB, (274) 65  
*N*-OH-3-MeO-AAB, (274) 65  
 Oil refining industry, (282) 209  
 Omethoate, (283) 113  
 Omission of in vitro cytogenetic testing, (272) 79  
 OMM, (279) 49  
 Oncogene, (276) 299  
 Oncogenes, (276) 275, (276) 329  
 Oncogenes, amplified, (276) 199  
 Oocytes, (266) 143  
 Operational characteristics, (266) 253

- Optimal use of, (266) 27  
 Organotin compounds, (280) 195  
 Origins of spontaneous mutations, (277) 139  
 Ornithine decarboxylase, (281) 55  
*Oroxylum indicum* Vent, (281) 55  
*Oryzias latipes*, (283) 263  
 Osteosarcoma, (276) 241  
 Overdispersion, (272) 133  
 Oxazaphosphorine nitrogen mustards, (268) 115  
 Oxidation, (275) 87  
 Oxidative activation, (269) 243  
 Oxidative DNA damage, (273) 253, (275) 377  
 Oxidative DNA modification, (283) 145  
 Oxidative mutagens, (283) 295  
 Oxidative phosphorylation dysfunction, (275) 169  
 Oxidative processes, endogenous, (267) 277  
 Oxidative stress, (269) 193, (275) 267, (275) 405  
 Oxidised sugar residues, (275) 343  
 Oxygen effect, (275) 331  
 Oxygen free radicals, (268) 139, (275) 169, (275) 281, (275) 355  
 Oxygen radical-mediated, human lymphocytes, (265) 245  
 Oxygen radicals, (275) 249, (275) 267, (275) 395, (281) 93  
 Oxygen species, (265) 75  
 Oxy-radicals, (275) 295  
 Ozone, (277) 221, (281) 203
- PAH metabolites, (268) 131  
 PAH photooxidation products, (281) 67  
 PALA resistance, (265) 9  
 Pancreas, (272) 139  
 Paper mill effluent, (270) 53  
 Paracetamol, (278) 253  
 Paracetamol, double-blind trial, (279) 181  
 Paramecium, (275) 41  
 Parental self-poisoning, (269) 35  
 $\alpha$ -Particles, (269) 1  
 Particulates, (278) 69  
 Passive smoking, (279) 233  
 PBB, (281) 151  
 PBN spin adduct, (268) 105  
 PCB, (281) 151  
 PCBs, chronic ingestion, (283) 179  
 P element insertions, (269) 63  
 Pentachlorophenol, (279) 205  
 Peripheral blood, (278) 83, (278) 103, (278) 113, (278) 121, (278) 131, (278) 145, (278) 169, (278) 193, (278) 205, (278) 209, (281) 99  
 Peripheral blood cells, (278) 117, (278) 127, (278) 139, (278) 165  
 Peripheral blood lymphocytes, (283) 199  
 Peripheral blood reticulocytes, (269) 113, (278) 99, (278) 109, (278) 153, (278) 181, (278) 197  
 Peripheral lymphocytes, (279) 145, (281) 31  
 Peripheral lymphocytes, CA frequencies in, (279) 181  
 Peripheral reticulocytes, (278) 159  
 Permitted dose, (283) 169  
 Persistence of sister-chromatid exchanges, (281) 129  
 Persistent lesions, (269) 119
- Perylene, (267) 173  
 Pesticide, (280) 187  
 Pesticide cytogenesis, (279) 165  
 Pesticides, (279) 145, (281) 173, (283) 113  
 Petite mutation, cytoplasmic, (265) 103  
*Petiveria alliacea*, (280) 29  
 p53 function, (277) 163  
 Phagocytes, (265) 245  
 Phagocytosis, (279) 55  
 Pharmacists handling anti-cancer drugs, (279) 199  
 Phenacetin, (278) 159  
 1,10-Phenanthroline, (266) 77  
 o-Phenanthroline, (275) 31  
 p-Phenylenediamine, (277) 201  
 Phenylene diamines, (269) 9  
 Phenylisocyanate, (283) 97  
 Phorbol myristate acetate, (265) 255  
 Phosphoramidate mustard-induced SCE, (279) 199  
 Photoirradiation, (268) 35, (280) 233  
 Photomutagenicity, (279) 103  
 (6-4) Photoproduct, (269) 285  
 (6-4) Photoproducts, (273) 73  
 Photoprotection, (279) 49  
 Photoreactivation, (268) 83, (273) 231, (273) 281  
 Phototherapy, (283) 65  
 Pigs, (283) 199  
 Pirmenol, (280) 205  
 Plant chromosomes, (266) 215  
 Plant extracts, (281) 47  
 Plant factors, (267) 201  
 Plant leaves, (271) 89  
 Plasmid integration, (274) 1  
 Plasmid molecules, broken, (266) 163  
 Plate incorporation, (281) 39  
 Plate incorporation assay, (268) 131, (276) 93  
 Plywood factory, (280) 1  
 P-M hybrid dysgenesis, (269) 63  
 Podophyllin, (266) 231  
*Poecilocus pictus*, (283) 243  
 Point mutation, (273) 213, (283) 119  
 Point reverse mutation, (282) 55  
 Pollutants, airborne, (280) 253  
 Polluted habitat, (283) 199  
 Polybutylcyanoacrylate nanoparticles, (268) 77  
 Polychromatic erythrocytes, (280) 87  
 Polycyclic aromatic hydrocarbons, (276) 125, (278) 1  
 Poly-D-lysine, (266) 99, (266) 215  
 Polyethers, macrocyclic, (280) 109  
 Polymerase chain reaction, (269) 1, (273) 193, (273) 203, (277) 239, (282) 1, (283) 13, (283) 75, (283) 119, (283) 255  
 Polymerase chain reaction, multiplex, (269) 1  
 Polymerase chain reactions, (283) 255  
 Polyoma virus, (279) 91  
 Polyphenol, (281) 77  
 Polyphenols, (269) 217  
 Polyploid, (280) 187  
 Polyvitamin product, (269) 251  
 Population biomonitoring, (280) 285



- Population study, (283) 69  
<sup>32</sup>P-Postlabelling, (268) 139, (275) 355, (275) 377  
<sup>32</sup>P-Postlabelling assay, (282) 139, (283) 1  
Potassium bromate, (269) 113  
Potassium chromate, (269) 141  
Potassium sorbate, (283) 107  
Potentially lethal damage, (268) 247  
Power, (272) 73  
Predictive tests, (266) 253  
Preferential repair, (269) 129, (274) 93  
Preincubation, (281) 39  
Pre-incubation assay, (276) 93  
Preincubation method, (271) 1  
Prenatal diagnosis, (273) 193  
Procarbazine hydrochloride, (278) 197  
Prokaryotes, (267) 183  
Proliferating activity, (281) 89  
Proliferating rate index, (280) 271  
Proliferation index, (283) 173  
Promitochondria, (273) 281  
Promoters, (266) 253  
Pro-mutagen activation, (276) 133  
Promutagens, (271) 79  
Pro-oxidants, (275) 295  
Prophage induction, (274) 79  
Propylene oxide, (277) 1  
Prospective study, (280) 271  
Prostaglandin synthase, (283) 7  
Protection against mutation induction, (279) 49  
Protein-bound reactive species, (275) 387  
Protein-pyrolysis products, (279) 61  
Proteins, (272) 205, (275) 387  
Proteins, DNA-binding, (273) 49  
Protein transport, (273) 231  
Pseudogene, (266) 105  
Pseudogenes, (267) 43  
Psoralen damage, (274) 1  
Psoralen plus UV light, (273) 57  
Psoriasis, (268) 131, (281) 11  
Pyridoxal, (266) 205  
Pyrimidine dimers, (273) 73, (273) 281, (274) 163  
Pyrrolizidine alkaloids, (281) 143, (282) 169
- 11q13, (276) 317  
QSAR, (266) 181, (280) 55  
QSAR analysis, (266) 117  
Quantitative analysis, (275) 181  
Quantitative structure-activity relationship, (268) 1  
Quercetin, (265) 75  
Quinoline derivatives, (278) 227  
Quinolines, (280) 55  
Quinone, (280) 225
- RadC* gene, (273) 263  
RAD6 error-prone pathway, (267) 55  
Radiation damage, (275) 81  
Radiation effects, (271) 69  
Radiation exposure, (265) 173  
Radiation mutagenesis, (269) 171  
Radiation sensitivity, (274) 237, (282) 13  
Radical damage, (275) 387  
Radical-mediated DNA damage, (268) 139  
Radioisotope postlabelling, (275) 343  
Radioprotection, (269) 237, (282) 107  
Rad3-102 mutator allele of yeast, (267) 55  
Rainbow trout, (267) 243  
Random mutagenesis, (277) 139  
Ras, (283) 119  
Rat, (268) 211, (278) 209  
Rat-liver epithelial cells, (265) 283  
Rat lung cells, (283) 1  
Rat stomach mucosa, (281) 55  
X-Ray induction, spontaneous, (283) 271  
γ-Rays, see also Gamma-irradiation  
X-Rays, (266) 215, (269) 1, (270) 31, (270) 191, (272) 237, (282) 265, (283) 237  
X-Ray sensitivity, (283) 125  
X-Rays, low-dose, (265) 273  
X-Rays, see also X-ray(s)  
Reactive oxygen species, (267) 1, (270) 167, (275) 145  
Rearrangement of *L-myc*, (276) 307  
RecA, (267) 67  
*RecA* gene, (282) 39  
RecA induction, (282) 203  
Rec-assay, (280) 195  
RecBCD enzyme, (281) 123  
*RecD* gene, (281) 123  
Recessive lethal mutations, (267) 105, (269) 149  
Rec mutants, (274) 79  
Recombinant DNA approaches, (277) 251  
Recombination, (266) 189, (267) 67, (276) 145  
Recombination-defective *c3G* female, (283) 271  
Recombination errors, (277) 139  
Recombinogenesis, (279) 121  
Red blood cells, (268) 21  
Redox sink therapy, (275) 195  
Reference values, (276) 61  
Regenerated hepatocytes, (280) 45  
Relative potency, (279) 261  
Rem1 mutant alleles, (267) 55  
Renal carcinogenesis, (275) 355  
Repair-deficient females, (180) 75  
Repair errors, (277) 139  
Repair genes, (273) 1  
Repair inhibitors, (283) 75  
Repair proteins, (273) 1  
Reparable *ad-3* mutations, (267) 105, (269) 149  
Replication errors, (277) 139  
Replication index, (279) 195  
Replicative DNA synthesis, (281) 55  
Reproducibility, (271) 1  
Reproductive system function, (275) 97  
Respiratory adaptation, (273) 281  
Respiratory chain, (275) 133  
Respiratory chain failure, (275) 125  
Restriction endonuclease, (268) 27  
Reticulocyte, (278) 83, (278) 103, (278) 131  
Reticulocytes, (278) 121

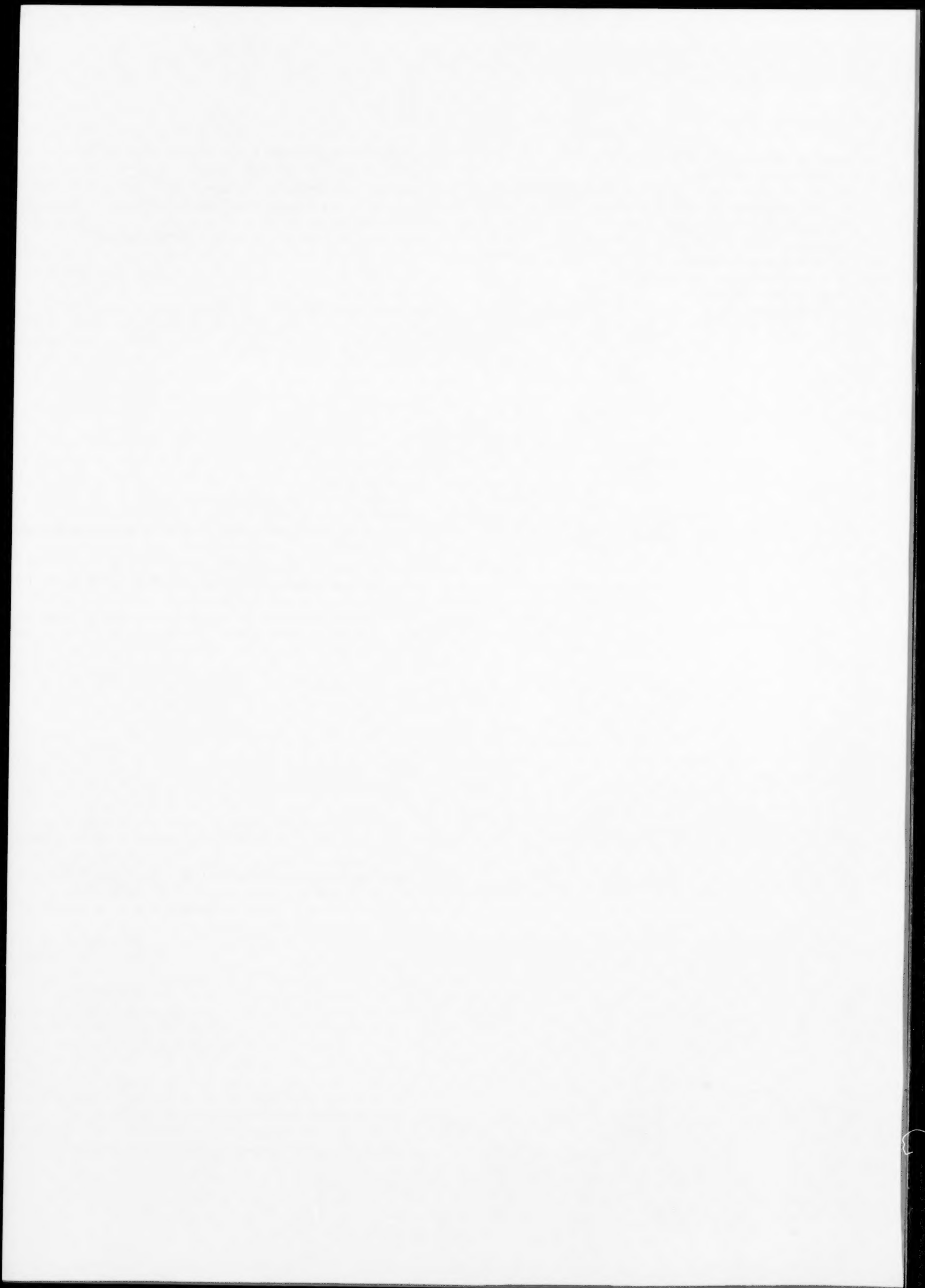
- Retinoids, (267) 157, (267) 291  
 Retinol, (267) 157  
 Reverse mutation, (280) 17  
 Reverse point mutation, (282) 235  
 RFLP, (266) 241  
 Ribonucleotide reductase genes, (281) 137  
 Ring-X loss, (279) 281  
 RNA splicing, (273) 203  
 Rodent bone marrow test, (281) 239  
 Rodents, (282) 191  
 Rodent tumor bioassay, (271) 269  
 Root growth, (281) 89  
 R-plasmid, (267) 67  
 RTECS, (279) 261  
 Rubiadin, (265) 263  
*Rubia tinctorum*, (265) 263  
 Rural population, (281) 173
- Saccharomyces cerevisiae*, (265) 103, (267) 193, (268) 83, (273) 281, (279) 49, (283) 279  
*Saccharomyces cerevisiae* assay, (280) 161  
*Saccharomyces cerevisiae*, *RAD3* gene, (267) 55  
*Saccharomyces cerevisiae*, strain D7, (282) 235  
 Safrole, (267) 201  
 Salicylazosulfapyridine, (283) 53, (283) 59  
 Salmonella, (269) 307, (271) 253, (279) 275, (281) 93, (282) 219  
 Salmonella assay, (271) 213  
 Salmonella bioassay, (276) 11  
 Salmonella/microsome assay, (268) 131, (278) 215, (279) 61  
 Salmonella/microsome test, (278) 227, (281) 247, (283) 35  
 Salmonella mutagenicity, (268) 255, (271) 269, (276) 87, (280) 103  
 Salmonella preincubation assay, (283) 83  
 Salmonella test, (281) 239  
 Salmonella tester strains, (267) 133, (269) 237  
*Salmonella typhimurium*, (265) 149, (270) 87, (276) 3, (276) 61, (280) 55, (281) 151, (281) 207, (283) 29, (283) 161  
*Salmonella typhimurium* /mammalian microsome system, (281) 143  
*Salmonella typhimurium* NM1011, (272) 91  
*Salmonella typhimurium* NM2009, (272) 183  
*Salmonella typhimurium* TA104, (266) 77  
*Salmonella typhimurium* TA102, (278) 265  
*Salmonella typhimurium* TA100 and TA98, (276) 93  
*Salvia miltiorrhiza*, (265) 149  
 Sampling time, (265) 31, (265) 45, (282) 191  
 Satellite DNA, (275) 13  
 SCE, see Sister-chromatid exchange  
 Scheduled DNA synthesis, (281) 25  
*Schistosoma japonicum*, (282) 177  
*Schizosaccharomyces pombe*, (267) 193  
 Screening methods, (267) 229  
 Seed germination, (283) 287  
 Selective mtDNA amplification, (275) 195  
 Selective reactivity, (283) 97  
 Selenite, (265) 203  
 Selenium, (269) 307  
 Senescence, (275) 13
- Sequential organic extracts, (276) 101  
 Sesquiterpenes, (268) 315  
 Severe malnutrition, (283) 173  
 SEWA murine cells, (276) 285  
 Sex chromosome loss, (281) 1  
 Sex difference, (283) 249  
 Sex hormones, (270) 211  
 Sex-linked recessive lethals, (268) 265  
 Sex-linked recessive lethal test, (278) 23, (279) 21  
 Sheep, (268) 199  
 Short-term assays, (279) 261  
 Short-term genotoxicity test data, (266) 7, (266) 27, (266) 43  
 Shuttle vector, (274) 135  
 Shuttle vector plasmids, (270) 115  
 Shuttle vectors, (275) 367  
 Single cell analysis, (277) 239  
 Single cell gel electrophoresis, (271) 101, (271) 243  
 Single-stranded DNA, (274) 19, (274) 135  
 Single-stranded DNA-binding protein, (274) 29  
 Singlet oxygen, (275) 367, (275) 377  
 Sister-chromatid differentiation, (272) 125  
 Sister-chromatid exchange, (265) 203, (268) 115, (268) 217, (270) 87, (270) 125, (270) 177, (271) 223, (272) 125, (272) 215, (278) 61, (278) 253, (279) 129, (279) 269, (280) 17, (280) 35, (280) 45, (280) 143, (280) 187, (280) 279, (281) 31, (281) 173, (282) 49, (282) 135, (282) 213, (283) 65, (283) 87, (283) 193, (283) 233, (283) 237  
 Sister-chromatid exchange experiments, (271) 39  
 Sister-chromatid exchange frequency, (268) 239, (271) 289, (278) 289  
 Sister-chromatid exchange induction, (268) 21  
 Sister-chromatid exchange rate, (282) 19  
 Sister-chromatid exchanges, (266) 273, (271) 49, (275) 31, (276) 261  
 Sister-chromatid exchanges, (279) 75, (279) 117, (279) 195, (279) 233, (280) 109, (280) 271, (281) 47, (283) 59, (283) 113, (283) 229  
 Sister-chromatid exchanges, spontaneous, (281) 227  
 Site-directed mutagenesis, (268) 59  
 Skin, (271) 223  
 Skin cancer, (273) 171  
 Skin puncture, (278) 259  
 Skin tumors, (273) 119  
 Sleep deprivation, (283) 229  
 Small-cell lung cancer, (276) 307  
 S9 mix, (276) 133, (282) 169  
 Smoking, (271) 289  
 Sodium azide, (283) 215  
 Sodium fluoride, (279) 109  
 Sodium sorbate, (283) 107  
 Soil, (279) 9  
 Solvent extraction efficiencies, (282) 89  
 Somatic cells, (266) 197, (271) 59  
 Somatic gene mutation, (267) 257  
 Somatic genotoxicity tests, (279) 21  
 Somatic mutation, (265) 173, (272) 17, (278) 43, (279) 239, (280) 291  
 Somatic mutation frequency, (277) 239  
 Somatic mutations, (267) 221, (270) 23, (272) 195

- Sonication extraction, (276) 33  
 Sorbic acid, (283) 107  
 SOS chromotest, (265) 61, (278) 1, (280) 195  
 SOS chromotest, semi-automated, (276) 125  
 SOS induction, (265) 75, (267) 1, (270) 135, (274) 65  
 SOS mutagenesis, (281) 221  
 SOS repair, (282) 39  
 SOS response, (274) 79  
 SOS responses, (272) 91  
 SOS system, (281) 137, (282) 247  
 Southern blot, (283) 75  
 Soxhlet extraction, (276) 33  
 Soybean, (279) 239  
 Species differences, (271) 49  
 Specific locus, (268) 265  
 Specific-locus mutations, (283) 185  
 Specific-locus test, electrophoretic, (282) 127  
 Spermatid, (281) 287  
 Spermatogonia, (268) 323  
 Spermatogonial stem cells, (282) 151  
 Sperm count, (280) 169  
 Spermine, (267) 193  
 Sperm morphology, (266) 291, (271) 49  
 Sperm of *Drosophila*, (281) 1  
 Sperm shape abnormality, (280) 169  
 Splenocytes, (280) 137  
 Spontaneous carcinogenesis, (277) 139  
 Spontaneous frequencies, (272) 195  
 Spontaneous mutagenesis, (266) 135, (267) 139, (277) 139  
 Spontaneous mutation, (266) 77, (269) 55  
 Spontaneous SCE, (281) 227  
 Spontaneous spectra, (270) 219  
 Sporidesmin, (268) 199  
 4S protein, (269) 201  
 SRM 1597, (276) 87  
 SRM 1649, (276) 87  
 SRM 1650, (276) 87  
 Stable DNA replication, (281) 63  
 Stainless steel welding, (279) 129  
 Standard reference material, (276) 33  
 Standard reference material 1650 (diesel particulate), (276) 101  
 Standard reference materials, (276) 11, (276) 61, (276) 81  
 Standard reference material 1649 (urban dust), (276) 101  
 Stationary phase, (282) 235  
 Statistics, (272) 195  
 Stereochemistry, (275) 69  
 Stereoisomer, (278) 289  
 Strand bias for mutagenesis, (274) 123  
 Strand specificity, (274) 147  
 Strand-specific repair, (274) 85  
 Streptolysin O, (268) 27  
 Structural factors modulating potency, (271) 269  
 Structure-activity methods, (272) 59  
 Structure-activity relational method, (272) 111  
 Structure-activity relationship, (265) 61, (268) 315, (269) 9, (280) 9, (280) 81, (280) 225  
 Structure-activity relationships, azo reduction, (277) 201  
 Styrene, (271) 49, (280) 35  
 Sulfapyridine, (283) 53, (283) 59  
 Sulphotransferase, inhibition of, (282) 253  
 Sunlight, (274) 123  
 Sunscreen, (279) 121  
 Supercoiled DNA, (275) 69  
 Supercritical fluid extraction, (271) 253  
 Supercypermethrin, (280) 161  
 Superoxide, (275) 405  
 Superoxide anion, (281) 215  
 Superoxide dismutase, (270) 167, (275) 267, (275) 281  
*SupF* mutants, selectable, (270) 219  
 SUP4-o, (268) 83  
 SUP4-o gene, (274) 123  
 Suppressor genes, (267) 257  
 Supravital staining, (278) 83, (278) 131, (278) 169, (278) 181, (278) 187, (278) 205, (278) 209  
 Surveillance genes, (273) 179  
 Swiss albino mice, (280) 169  
 Swiss mice, (280) 45  
 Synaptonemal complex, (282) 3  
 Synaptonemal complex alterations, (281) 283  
 Synergism, (270) 31, (270) 71  
 Systemic lupus erythematosus, (276) 275  
 TA100 mutagenicity, (266) 181  
 Tannic acid, (270) 31, (270) 87  
 Tanshinones, (265) 149  
 Target organ toxicity, (268) 115  
 TCDD receptor affinity, (282) 219  
 T cell receptor gene, (265) 173  
 T7 DNA polymerase, (269) 285  
 T4 DNA polymerase 3'-5' exonuclease, (269) 285  
 Telomere association, (269) 107  
 Tequila, (281) 283  
 Test data, (266) 43  
 Testes and epididymides, (266) 291  
 Testing parameters, comparing, (266) 7  
 Tetrachlorohydroquinone, (279) 205  
 $\Delta^9$ -Tetrahydrocannabinol, (278) 47  
 1,3,7,9-Tetramethyluric acid, (269) 259  
 6TG-resistant mutations, (268) 231  
 $\beta$ -Thalassaemia, (282) 213  
 Theophylline, (269) 259, (280) 271  
 Thin-layer chromatography, (268) 139  
 6-Thioguanine resistance, (265) 165  
 Thioguanine-resistance mutation, (280) 17  
 Thioguanine-resistant lung fibroblasts, (272) 195  
 Thioguanine-resistant mutant, (270) 167  
 6-Thioguanine-resistant mutants, (270) 115  
 Thioproline, (282) 119  
 Three-way differential staining, (270) 177, (272) 215  
 Threonine, (268) 191  
 $^3\text{H}$ -Thymidine, (282) 113  
 Thymidine glycol, (267) 277  
 Thymidine kinase (*tk*) gene, (267) 89  
 Thymine dimers, (270) 145  
 Tin, (282) 61  
 Tire industry, (279) 195



- Tissue bioenergy mosaic, (275) 195  
 T lymphocyte cell lines, human, (274) 45  
 T-lymphocytes, (265) 165, (273) 127, (273) 171  
 T-lymphocytes, human, (283) 255  
 T lymphocyte subpopulation, (268) 43  
 T lymphocyte subpopulations, (270) 125  
 Tobacco, (281) 203  
 Tolerance to alkylating agents, (273) 271  
 Topoisomerase II alteration, (269) 319  
 Toxicity, (266) 291  
 Toxicity evaluation, (282) 159  
 Tradescantia, (270) 3, (270) 31, (270) 71, (281) 203  
 Tradescantia bioassay, (270) 23  
 Tradescantia-micronucleus assay, (270) 45, (270) 65  
 Tradescantia micronucleus system, (270) 39  
 Tradescantia stamen hair assay, (270) 53  
 Transcription, (274) 57, (274) 93  
 Transformation, (266) 241  
 Transgenic mice, (275) 281  
 Transition metal ions, (281) 261  
 Translocation, (276) 241  
 Transplacental genotoxicity, (281) 99  
 Transplacental transport, (268) 77  
 Transposition, (267) 139  
 Transpositions, (275) 227  
 Transposon, (267) 31  
 Transposon movement, (269) 63  
 Transposon *Tn10*, (283) 161  
 Transversion, (283) 29  
 Trenimon mutagenicity, (278) 47  
 Triazino indole derivatives, (268) 1  
 Trichlormethine hydrochloride (TS-160), (266) 291  
 2,4,6-Trichlorophenol, (280) 175  
 Trichloropropylene oxide, (277) 1  
 Trichothiodystrophy, (273) 97, (273) 119, (273) 127  
 Triethylenemelamine, (278) 127, (282) 69  
 TriMeIQx, (268) 191  
 Trisomy 21, (275) 81  
 Tritium, (278) 43  
 Trp-P-2, (278) 277, (282) 177  
 Trp-P-2(NHOH), (282) 177  
 Tumorigenesis, (266) 273  
 Tumor necrosis factor, (268) 217
- Ultraviolet, (273) 213, (275) 87  
 Ultraviolet damage, (270) 135  
 Ultraviolet irradiation, (270) 145  
 Ultraviolet light, (274) 135, (283) 279  
*UmuC* gene, (272) 183  
*Umu* DC operon, (281) 221  
*Umu* gene expression, (269) 231  
*Umu* test, (272) 91, (280) 67  
 Unsaturated dialdehydes, (268) 315  
 Unscheduled DNA synthesis, (274) 211, (278) 271, (279) 129, (281) 17, (282) 253, (283) 21  
 Unscheduled DNA synthesis, autoradiographic evaluation, (272) 9
- Uracil-DNA-glycosylase, (273) 231  
 Urban air-particulate extract, (283) 295  
 Urban dust/organics, (276) 81  
 Urethane, (271) 59, (271) 223, (278) 205, (281) 99  
 Urinary biomarkers, (267) 277  
 Urinary mutagenicity, (268) 131  
 Urine, (268) 131, (280) 93  
 U5 RNA, (267) 97  
 UV, (266) 205, (268) 287, (282) 203  
 UV-B, (279) 121, (282) 183  
 UV-C, (273) 137  
 UV-C sensitivity, (273) 127  
 UV damage, (273) 43, (273) 85  
 UV endonuclease, (269) 79, (273) 43  
 UV-induced mutagenesis, (273) 73  
 UV irradiation, (265) 195, (273) 49, (282) 55, (282) 247  
 UV photoproducts, (268) 83  
 UV radiation, (274) 147  
 UV-radiation mutability, (267) 67  
 UV-radiation resistance, (267) 67  
*Uvr* defective, (281) 63  
 UV repair, (281) 123  
 UV resistance, (281) 105  
*Uvr* system, (281) 207  
 UV sensitivity, (273) 119, (273) 171  
 UV-specific protein, (282) 55
- Vanillin, (268) 231, (279) 281  
 Vapour-phase mutagens, (271) 253  
 Variability study, (280) 103  
 V79 cells, (269) 319, (270) 97, (272) 139, (279) 55, (279) 109, (279) 205, (281) 151, (282) 79, (282) 231, (283) 75  
 V(D)J recombinase, (283) 13  
 V79/HGPRT assay, (268) 315  
*Vicia faba*, (279) 9, (282) 69  
 Vinblastine, (280) 87  
 Vincristine, (280) 181, (282) 79, (282) 159  
 Vincristine sulfate, (278) 187  
 Vinyl chloride, (281) 129, (282) 265  
 Vinyl esters, (279) 75  
 Viral DNA, recombination, (274) 201  
 Visual handicap, (270) 103  
 Vitamin A, (267) 265, (269) 269  
 Vitamin B<sub>6</sub>, (266) 205  
 Vitamin B<sub>2</sub>, (283) 211  
 Vitamin C, (267) 201  
 Volatile compounds, (271) 213
- Wastewater clastogenicity, (270) 45  
 Water contamination, (270) 53  
 Water quality, (283) 157  
 Weight-of-evidence analysis, (266) 7  
 Wheat sprout, (269) 201  
 Wing mosaic test, (278) 23  
 Wing spot test, (180) 75, (280) 291, (281) 169  
 Workshop on DNA repair, (273) 1

- Xanthine oxidase, (274) 103  
X chromosome, (282) 113  
Xeroderma pigmentosum, (273) 119, (273) 127, (273) 137,  
(273) 157, (273) 171, (274) 57, (274) 211  
Xeroderma pigmentosum group C, (273) 213  
Xeroderma pigmentosum, group D, (273) 97  
XP complementation group E, (273) 49  
XPD complementation group, (273) 97  
X-ray analysis, (266) 281  
X-ray exposure, (282) 3  
X-ray mutagenesis, (282) 197  
X-rays, (268) 183  
X-rays, see also X-Ray(s)  
3Y1 cells, (267) 97  
Yeast, (266) 135, (270) 151, (273) 231, (279) 121, (282) 55  
pZ189, (282) 183  
Zeolite, (265) 245  
Zygotes, one-cell, (266) 151





# MUTATION RESEARCH

## Publication schedule for 1993

Mutation Research is published according to a volume-numbering scheme that embraces all sections of the journal, in addition each section has its own colour code.

MUT (green), Fundamental and Molecular Aspects of Mutagenesis; MUTENV (blue), Environmental Mutagenesis and Related Subjects including Methodology; MUTDNA (brown), DNA Repair; MUTAGI (red), DNAGing: Genetic Instability and Aging; MUTREV (purple), Reviews in Genetic Toxicology; MUTGEN (pink), Genetic Toxicology Testing and Biomonitoring of Environmental or Occupational Exposure; MUTLET (yellow), Mutation Research Letters.

1993	MUT	MUTENV	MUTDNA	MUTAGI	MUTREV	MUTGEN	MUTLET	
Jan.	285/1	291/1	293/2	295/2	296/3	298/3	301/1	
Feb.	285/2		293/3			295/3	298/4	301/2
Mar.	286/1	291/2		295/4			299/1	301/3
Apr.	286/2						291/3	297/1
May	287/1	292/1		295/5	297/2			
June	287/2		294/1			295/6	297/3	299/4
July	288/1	294/2		297/1	300/1			300/2
Aug.	288/2		294/3			300/3	300/4	
Sep.	289/1	292/2		300/3	300/4			
Oct.	289/2		292/3			303/2	303/3	
Nov.	290/1	292/3		303/3	303/4			
Dec.	290/2		292/3			303/4		
20 Vols. 284–303 62 issues + INDEX *	7 Vols. 284–290 14 issues	2 Vols. 291, 292 6 issues		2 Vols. 293, 294 6 issues	1 Vol. 295 6 issues		2 Vols. 296, 297 6 issues	3 Vols. 298–300 12 issues

\* Author and Subject Index for the year 1993 (covering all sections).

The following issues of MUTATION RESEARCH were published ahead of schedule in 1992, in order to reduce publication time. MUT (green), 284/1, 1 Dec. 1992; MUT (green) 284/2, 16 Dec. 1992; MUTDNA (brown), 293/1, Nov. 1992; MUTAGI (red), 295/1, Dec. 1992; MUTREV (purple), 296/1 + 2, Dec. 1992; MUTGEN (pink), 298/1, Nov. 1992; MUTGEN (pink), 298/2, Dec. 1992. The issues remain part of the 1993 subscription year. We apologize for the inconvenience these changes in schedule may cause.

## Subscription Information

MUTATION RESEARCH (complete)

1993, Volumes 284-303 (20 volumes in 63 issues)

Full subscription: Dfl.6560.00 + Dfl.660.00 postage, packaging and handling. Total price Dfl.7220.00 (US \$4349.50).

MUTATION RESEARCH/ENVIRONMENTAL MUTAGENESIS AND RELATED SUBJECTS INCLUDING METHODOLOGY

1993, Volumes 291, 292 (2 volumes in 6 issues)

Part subscription: Dfl.704.00 + Dfl.66.00 postage, packaging and handling. Total price Dfl.770.00 (US \$464.00).

MUTATION RESEARCH/DNA REPAIR

1993, Volumes 293, 294 (2 volumes in 6 issues)

Part subscription: Dfl.704.00 + Dfl.66.00 postage, packaging and handling. Total price Dfl.770.00 (US \$464.00).

MUTATION RESEARCH/DNAGing: GENETIC INSTABILITY AND AGING

1993, Volume 295 (1 volume in 6 issues)

Part subscription: Dfl.352.00 + Dfl.33.00 postage, packaging and handling. Total price Dfl.385.00 (US \$232.00).

MUTATION RESEARCH/REVIEWS IN GENETIC TOXICOLOGY

1993, Volumes 296, 297 (2 volumes in 6 issues)

Part subscription: Dfl.704.00 + Dfl.66.00 postage, packaging and handling. Total price Dfl.770.00 (US \$464.00).

MUTATION RESEARCH/GENETIC TOXICOLOGY TESTING

1993, Volumes 298-300 (3 volumes in 12 issues)

Part subscription: Dfl.1056.00 + Dfl.99.00 postage, packaging and handling. Total price Dfl.1155.00 (US \$696.00).

MUTATION RESEARCH LETTERS

1993, Volumes 301-303 (3 volumes in 12 issues)

Part subscription: Dfl.1056.00 + Dfl.99.00 postage, packaging and handling. Total price Dfl.1155.00 (US \$696.00).

The Dutch guilder price is definitive. The U.S. dollar price is subject to exchange-rate fluctuations and is given only as a guide.

Subscriptions are accepted on a prepaid basis only, unless different terms have been previously agreed upon. Subscription rates and conditions for Members are available upon request from the Publisher.

Subscription orders can be entered only by calendar year (Jan.-Dec.) and should be sent to Elsevier Science Publishers, Journal Department, P.O. Box 211, 1000 AE Amsterdam (The Netherlands), telephone 31.20.5803642, fax 31.20.5803598, or to your usual subscription agent.

Postage and handling charges include surface delivery except to the following countries where air delivery via SAL (Surface Air Lift) mail is ensured: Argentina, Australia, Brazil, Canada, Hong Kong, India, Israel, Japan, Malaysia, Mexico, New Zealand, Pakistan, PR China, Singapore, South Africa, South Korea, Taiwan, Thailand, U.S.A.

For all other countries airmail rates are available upon request. Claims for missing issues must be made within six months of the publication (mailing) date, otherwise such claims cannot be honoured free of charge.

This Journal has adopted the ADONIS System. Copies of individual articles can be printed out from CD-ROM on request. An explanatory leaflet can be obtained by writing to ADONIS b.v., P.O. Box 839, 1000 AV Amsterdam (The Netherlands).

In the United States and Canada: For further information concerning this or any other Elsevier Science Publishers journal, contact Elsevier Science Publishing Co., Inc., Journal Information Center, 655 Avenue of the Americas, New York, NY 10010, U.S.A., tel. (212) 633-3750, telefax. (212) 633-3990, telex 420-643 AEP UI.

## CONTENTS

<i>Master Author Index to Volumes 265-283 (1992)</i> .....	1
<i>Master Keyword Index to Volumes 265-283 (1992)</i> .....	37

*Cited in Biological Abstracts; Chemical Abstracts; Current Awareness in Biological Sciences (CABS); Current Contents / Life Sciences; Excerpta Medica; Index Medicus; Pascal M; Reference Update*

PRINTED IN THE NETHERLANDS

